IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND

UNITED STATES OF AMERICA	CRIMINAL ACTION 11-186-S
VS.	SEPTEMBER 30, 2013 **VOLUME I**
JOSEPH CARAMADRE and RAYMOUR RADHAKRISHNAN	PROVIDENCE, RI

HEARD BEFORE THE HONORABLE PATRICIA A. SULLIVAN

MAGISTRATE JUDGE

(Evidentiary Hearing)

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I N D E X

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30 SEPTEMBER 2013 -- 9:43 A.M.

THE COURT: Good morning, everyone. We are here this morning in the matter of the United States of America versus Joseph Caramadre and Raymour Radhakrishnan. This is criminal matter 11-186-S, and the purpose of today's proceedings is an evidentiary hearing so that I will be able to make a Report and Recommendation to Judge Smith to assist in the calculation of the restitution amount, that is the amount of actual victim losses.

Would counsel identify yourselves for the record, please.

MR. VILKER: Good morning, your Honor. Lee Vilker, Assistant United States Attorney. Alongside me is John McAdams, also Assistant United States Attorney.

MR. THOMPSON: Good morning, your Honor. Olin Thompson for Mr. Radhakrishnan.

MR. MURPHY: Good morning, Judge. William J. Murphy on behalf of Mr. Caramadre.

MR. OLEN: Good morning, your Honor. Randy Olen on behalf of Mr. Caramadre.

THE COURT: All right. A couple of minor housekeeping matters before we get started. I just wanted to lay out for everyone my game plan for the day. I thought we'd go till 11:15, take a morning

break, short, then go till one o'clock. I'm optimistically looking at asking to have you back by 1:45 so we can be up and running again by 2:00, maybe take a break at 3:00 and then go -- my outline of the day says 4:45, but I will be mindful, Mr. Vilker, as to whether your witness has a problem and needs to complete testimony today, so that if we have to go past 5:00 I'm prepared to do that.

MR. VILKER: Your Honor, my understanding is Dr. Kalotay does need to have his testimony complete today. I believe he needs to catch a train to Boston by late in the afternoon. So I'm hopeful we'll be long finished by then but there is some kind of issue with time.

THE COURT: All right. I had recalled that, but, anyway, let me just ask if there's anything that any party needs to bring to my attention before I ask Mr. Vilker to begin.

MR. MURPHY: Judge, the defense has conferred with the Government. I do not believe it's going to take all day.

THE COURT: Good. One thing that I will clarify before we begin, which I think is important, Mr. Radhakrishnan's brief brought to my attention and indeed I just wanted to confirm that what you stated in

your papers, Mr. Thompson, is absolutely my impression and that is that I have not been asked by Judge Smith to address at all the subject of allocation of restitution, and we won't have any evidence on that and I will not be addressing it. Indeed I'll be very clear in my Report and Recommendation that that remains as an issue to be brought up before the district judge.

MR. THOMPSON: I appreciate that, your Honor. Thank you.

THE COURT: All right. Mr. Vilker, if you'd like to begin with a brief argument, please proceed; and otherwise, you can call your first witness.

MR. VILKER: Your Honor, as the Government submitted in our memorandum on the subject, the issue of the loss of the bonds is somewhat complicated because it involved a number of economic factors including the amounts of the bonds, the amount of their redemption, the maturity date, the time value of money to each and every company. So it's really an area that once the Government started examining it made us very clear that this is way beyond our area of expertise and we needed to get an expert.

We located Dr. Kalotay, who will be the Government's only witness on this issue, who has an incredible background, is world-renowned for his

expertise on debt management and has written extensively on corporate bonds as a -- excuse me, on death-put bonds, has a patent that predated his retention by the Government in this case concerning how to value these type of bonds. Dr. Kalotay performed a company by company evaluation to determine the amount of losses and is prepared to testify and explain to your Honor how he reached the conclusions that he did.

So with that being said, the Government would call Dr. Kalotay to the stand.

THE COURT: Dr. Kalotay, would you come forward, please, sir.

ANDREW KALOTAY, first having been duly sworn, testified as follows:

THE CLERK: Could you please state and spell your last name for the record.

THE WITNESS: Andrew Kalotay, K-A-L-O-T-A-Y.

THE CLERK: Thank you. You may be seated.

DIRECT EXAMINATION BY MR. VILKER

Q. Good morning, Dr. Kalotay.

Can you hear me okay?

A. Yes. I hear you fine.

Q. Okay. Can you speak into the microphone so we can --

A. Yes.

Q. Dr. Kalotay, let me begin by asking you some questions about your educational background. Do you have a college education?
A. I do.
Q. Where did you go to college?
A. I got my undergraduate degree in mathematics at Queens University in Kingston, Ontario; got my master's at the same institution; and I have a Ph.D. in mathematics from the University of Toronto.
Q. And what year did you obtain your Ph.D. in mathematics?
A. 1968.
Q. Let me just ask some general questions about your professional experience. After getting your Ph.D. in mathematics, where were you subsequently employed?
A. My first job was at Bell Laboratories in New Jersey. And from Bell Laboratories, I transferred to the American Telephone and Telegraph Company, which was the holding company in 1973.
Q. And did you, in 1979, did you obtain employment with a company known as Dillon Read and Company?
A. Yes.
Q. What kind of company is that?
A. Dillon Read was an investment bank.
Q. What was your position at Dillon Read?

A. I was an analyst at Dillon Read.
Q. And what type of investment product were you focused on there?
A. It's not so much investment as borrowing, working with corporations on a subject referred to as debt management.
Q. By "debt management," does that include corporate bonds?
A. It's corporate bonds. It's corporations who issue bonds. It's more from the issuers' perspective rather than from the investment perspective.
Q. After you left -- how long did you remain at Dillon Read?
A. I was at Dillon Read from 1979 until 1981.
Q. Where did you go in 1981?
A. In 1981, I went to Salomon Brothers.
Q. What was your position at Salomon Brothers?
A. Once again, I was a bond analyst specializing in corporate debt.
Q. And did you advise a number of corporations on the issuance as they were preparing to issue bonds to raise funds?
A. At Salomon Brothers?
Q. Yes.
A. Yes, I did.

Q. How long did you remain employed at Salomon Brothers?
A. I was there from 1981 until 1990.
Q. Where did you go in 1990?
A. In 1990, I started up my own little firm, Andrew Kalotay Associates.
Q. Where is your firm based?
A. We're in New York City, 61 Broadway.
Q. And you're the owner of that?
A. I'm the whole owner, yes.
Q. Do you have a number of employees?
A. We have a number of employees, yes.
Q. And what does Andrew Kalotay Associates do?
A. We do essentially two things. One is we advise issuers on debt management, and the second line of business is licensing-related software.
Q. When you say you advise issuers on debt management, are you talking about bonds?
A. It's about bonds and interest rate derivatives.
Q. Now, in addition to your -- before I ask that, so from 1990 through the present you're employed at Andrew Kalotay Associates?
A. Yes.
Q. And have you had, in addition to your professional experience, have you had academic experience?

A. I have taught over the years. I taught as an adjunct at Wharton and at Columbia University. And I worked full-time at -- for a couple of years I taught at Fordham University. And then from 1995 to '97, I was the director of the Financial Engineering Program, a graduate level program at Polytechnic University, which is now part of New York University.
Q. When you say "financial engineering," what does that mean?
A. It's applying mathematical techniques to solve financial problems. The focus of my particular program was in bonds because my personal interest is in bonds.
Q. Is it fair to state, Mr. Kalotay, that you have had significant experience throughout your career in dealing with corporate bonds?
A. I believe so.
Q. Now, before I discuss more of your background, can you just explain to the Court when we say "bond," what are we referring to?
A. Well, bonds are securities. The typical sort of fixed coupon bond pays interest at a stated rate over its life up to its maturity. Many of the corporate bonds come with options, either issuer's options or investor options that can -- the right to terminate the contract prior to its maturity date.

Q. What's the maturity date for a bond?
A. The maturity date is the date on which the principal payment, the principal must be repaid by the borrower, by the issuer to the investor.
Q. And have you assisted numerous corporations over the years in their issuance of bonds?
A. Yes. We do two things on this debt management side on a high level. One is help with the structuring of any bond, and the second is assist with the decision how to retire them using options.
Q. Now, are you familiar with a particular type of bond that is known as a survivor option bond?
A. Yes, I am.
Q. And how did you first become familiar with survivor option bonds?
A. One of our -- our oldest client, actually, is Tennessee Valley Authority, and they started issuing these bonds in order to diversify their investor base, and that's why I can talk about these bonds.
Q. Do you recall approximately how long ago that was?
A. I believe around 1994 or so.
Q. And are survivor option bonds known kind of in the vernacular as death-put bonds?
A. They are known as death-put bonds.
Q. And can you describe generally what a survivor

option or a death-put bond is?

A. It's a regular bond in all regards with the added feature that if the holder dies, the estate of the deceased holder can return the bond, put the bonds back to the issuer and receive the entire face amount, par amount, principal amount.

Q. So for example, if I purchased a death-put bond and I were to pass away, my estate would be able to then redeem the bond at the full value?

A. Exactly.

Q. Now, did these bonds typically have maturity dates that are many years or even decades in the future?

A. Yes. They can be as long as 30 years.

Q. And is there any requirement -- well, let me strike that.

If the holder of the bond were to pass away and the maturity date were not for 30 years into the future, would the holder of the bond -- would the estate have to wait those 30 years before redeeming it at its full value.

A. The redemption is normally in the same year as the time of the death of the holder.

Q. And are these type of bonds, are they originally purchased directly from the corporation, the issuer?

A. Well, they are purchased by the underwriter of the

bond, yes.
Q. So is there a secondary market which these bonds can be purchased?
A. There is a very limited, very narrow secondary market for these bonds. These bonds by their very nature are held by retail investors. They tend to be relatively small in size compared to so-called institutional bonds. There is a secondary market, but it is extremely light.
Q. It's light in comparison to let's say like the regular bond market?
A. Yes, it is.
Q. Okay. But given that this is a relatively small market, is there the ability of a consumer or an individual to go to the secondary market and purchase one or more of these death-put bonds?
A. There may be opportunities.
Q. And does the price of the actual bond fluctuate on the secondary market?
A. The price does fluctuate due to two factors. One is the general level of interest rates as depicted by the U.S. Treasury rates; and the second factor is the perceived risk of the individual company that's responsible for these bonds, the issuer.
Q. Is there something called the par value of a bond?

A. Yes.
Q. What does that refer to?
A. It's the principal amount. It's the amount that has to be repaid to the investor upon the maturity of the bond.
Q. So for instance, if I bought bonds with a face value of $100,000, would $100,000 be the par value?
A. Yes.
Q. Now, on the secondary market and the price at which these bonds can be purchased, can they be both below or above the par value?
A. They can be either below or above, depending on the factors I've cited.
Q. What factors in the economy would lead to a survivor option bond being sold on the secondary market for below par value?
A. In essence, it could happen when the issuer's borrowing rate exceeds the stated interest rate on the bond. And there are two -- as I mentioned before, there are two factors that determine the issuer's borrowing rate. One of them is the general level of interest rates, and the second one is the perceived risk of the issuer.
Q. Just kind of explain that. You said a lot there.
If a bond -- you mentioned before these bonds

have coupon rates?

A. Yes.

Q. And the coupon rate, and correct me if I'm wrong, indicates the amount of interest under the terms of the bonds that the issuer is going to be paying the bond holder?

A. Yes. It is the stated interest rate.

Q. So it could be, for example, five percent that they take per year?

A. It could be five percent. It could be much higher. It could be much lower.

Q. So if you just take this five percent as an example, if bonds with $100,000 par value have a coupon rate of five percent, what would cause those bonds to be on sale or available for purchase for less than the $100,000 par value?

A. In essence, if the prevailing interest rate of this particular maturity, whatever maturity you have in mind, if that interest rate exceeds five percent, the price of the bond would be below par, below 100.

Q. And by "the prevailing interest rate," are you referring to the amount of money it would cost the company to go out in the market itself and borrow more money?

A. The interest rate at which the company at this

time could be borrowing.

Q. So if the company can only get a loan at that point or issue new bonds for seven percent, then the bond on the market that's selling -- has a five percent coupon rate would decrease in value?

A. Yes.

Q. Okay. And conversely, if the company were able to issue new bonds or somehow raise funds for less than the coupon rate, say this company in my example was able to issue new bonds at the prevailing rate, they were able to get three percent, what would happen at that point to the value of the bond?

A. In that case, the price of the bond would exceed the par amount.

Q. Now, are you familiar with something called a call option?

A. Yes, I am.

Q. What is a call option?

A. The call option bond is arrived -- it's an option held by the issuer to redeem the bond prior to maturity at stated prices.

Q. When you say "stated prices," what does that mean?

A. The stated price is the so-called call prices. In the case of these retail bonds, there's only one price normally, which is a par amount. In more complicated

situations, the call price can be somewhat over par, for example, could be 104 percent of par amount initially and gradually decline over the life of the bond to par.

Q. Now, you mentioned when you first started testifying about the survivor option bonds, that your understanding was that the estate of the owner of the bond were able to redeem it -- would be able to redeem it at the maturity value upon the death of the owner; is that correct?

A. At the par value.

Q. Did you become aware that in addition to the estate of the owner being able to redeem it upon the death of the owner that many of these bonds allowed two individuals to jointly purchase the bond together and for the other to be able to redeem it upon the death of the owner?

A. I had not been aware of this prior to this case.

Q. Did you become aware of that fact in this case?

A. Yes.

Q. And you're saying before you were retained by the Government in this case, you were unfamiliar with the ability on these bonds for a co-owner to redeem the bond upon the death of the owner?

A. I had never heard of it.

Q. What was your understanding based on your years of experience of why these bonds were created by these corporations?
A. It's to facilitate the resolution of the estate upon the death of the owner, and it's a convenient way to recover the -- to basically sell the bond and receive the par value.
Q. Now, have you written articles in academic journals about death-put bonds?
A. I did write a couple of articles.
Q. In 2009, did you write an article that appeared in CFA Institute?
A. Yes, I did.
Q. What article was that?
A. It was something like "Estate-Put Bonds Value Lies in the Eyes of the Beholder," or some catchy title.
Q. What was the subject matter of that article?
A. The basic idea was -- this article was written for the CFA publication and -- Certified Financial Analyst, CFA. And the point was that the value of these death-put bonds depends on the actuarial assumptions regarding the owner, and these bonds are much more -- they're much more valuable to investors who have a shorter life expectancy than for those who have longer life expectancy.

Q. At this point I want to show you what has been marked as Government Exhibit 7.

MR. VILKER: And I would ask the Court for permission to hand the entire binder over to Dr. Kalotay. I've handed copies to the defense, and I believe your Honor has a copy and I've given the court clerk the originals of the documents we would be moving into evidence.

THE COURT: That sounds good, Mr. Vilker. Sounds like a convenient way to proceed.

MR. VILKER: Thank you.

Q. Dr. Kalotay, I'm -- you see on the screen in front of you an article that you published called "Some Bonds Are Worth More Dead Than Alive"?

A. Yes, I do.

MR. VILKER: Your Honor, at this point I could do this with each exhibit, but if there's no objection from the defense I would just move into evidence the 14 exhibits that were attached to the Government's memorandum.

THE COURT: Any objections?

MR. THOMPSON: No, your Honor.

MR. MURPHY: Judge, the only objection we would have on behalf of Mr. Caramadre is Exhibit 1 is just literally the Government's argument. So we have no

objections to 2 through the remaining.

MR. VILKER: I think Exhibit 1 is the statement of facts.

THE COURT: Yes. I think Exhibit 1 is a portion of the plea agreement.

MR. MURPHY: Judge, we have no objection.

THE COURT: All right. So Exhibits 1 through 14 may be received full.

MR. VILKER: Thank you, your Honor.

(Government Exhibits 1-14 admitted in full.)

Q. Is that a picture of you on the left side of the article?

A. Yes, it is.

Q. Okay. Now, what was the -- first of all, I just want to point out to you that this article is from Estate Planning Resources' database, Mr. Caramadre's, the Defendant here's own computer.

What year did you publish this article? 2006 seem right to you?

A. Yes. 2006. Exactly.

Q. And what was the subject matter of this article?

A. This article looks at these estate-put bonds from the perspective of an issuer and analyzes whether or not these bonds are economic to issue relative to so-called institutional bonds. The federal agency I'm

referring to here is the Tennessee Valley Authority.
Q. Okay. Well, in general, without getting into the details of this article, the title "Some Bonds Are Worth More Dead Than Alive," what did you mean by that?
A. Well, obviously, it's a bit of fun here but the basic -- this part of the article was written in Financial Engineering News and most of finance focuses on institutions and investments. Much of my focus is on what I refer to as debt management and on retail investors. So in a sense, I wanted my colleagues to become aware of the existence of these bonds which are very interesting from a purely mathematical perspective.
MR. THOMPSON: Your Honor, I hate to interrupt. Can I approach for one minute with Mr. Vilker on a personal issue? It's nothing to do with the case. Thank you.
THE COURT: Sure.
MR. THOMPSON: Thank you.
(Side bar conference off the record.)
THE COURT: We will take a one-minute in place recess and as soon as Mr. Thompson comes back we will resume.
(Pause.)
MR. THOMPSON: Judge, thank you for the recess.

THE COURT: Mr. Thompson, anything that you think would be appropriate here, obviously your client's interests are important here, but I recognize that we can be very flexible under the circumstances.

MR. THOMPSON: Judge, I appreciate that. I think having spoken to Mr. Vilker and Mr. Murphy it's best for me and I think it's best for everyone here we continue with this today. Frankly, I don't think it's going to go to the afternoon. If it does, we can address that when we get to it.

THE COURT: Okay.

MR. THOMPSON: Thank you very much.

THE COURT: All right. Mr. Vilker, you can proceed.

Sorry for the interruption, Dr. Kalotay.

Q. So Dr. Kalotay, I was asking you about the premise of this article that some bonds are worth more dead than alive. Under what situation would one of these bonds be worth more to the holder on the bond if he or she were to pass away rather than to continue living from a purely economic perspective?

A. Essentially, if the prevailing value of the bond, price of the bond, its trading on the market is below the stated value, par value.

Q. Now, many of these bonds in this particular case

were purchased in 2008. That was the year of the financial meltdown, correct? You just have to answer yes or no for the record.

A. Yes. Yes, it is.

Q. What occurred as far as the value of many of these corporate bonds during the calendar year 2008?

A. Historically, the issuers of these bonds were normally very -- they were Triple A companies, very credit-worthy companies. That's why these bonds appealed to retail investors. In 2008, some of these companies fell on hard times and the credit deteriorated; and as a result, the cost of borrowing went much higher and at the same time as a result the values of these bonds fell substantially below par.

Q. Would that mean that an individual would have been able to purchase some of these bonds for well under the price of the maturity value?

A. To the extent that you could find these bonds. They are not very liquid. If they did trade, I would expect that the price would have been considerably below par.

Q. Now I want to show you Exhibit 9. It should appear on the screen in front of you.

What is Exhibit 9, Dr. Kalotay?

A. Yes. I see it. It's a patent that I received, we

received for the technology to value bonds with an estate-put.

Q. And it says here that it's filed on March 22nd, 2007. Is that the time that you got this patent?

A. I'm not sure when we got the patent. I think that's when we filed. It took about -- it took several years to obtain the patent.

Q. Had you obtained this patent -- actually, I see it says date of patent September 28, 2010?

A. Yes.

Q. Okay. And was that prior to your retention by the Government in this case as an expert witness?

A. Yes. It is prior to it.

Q. And I just want to show you this page. And without going into the details that are in all these boxes, what generally -- what formula are you describing in this patent?

A. Well, the general idea is to describe how to value bonds with an estate-put. One part is what is shown here, which has to do with decomposing the put option into annual increments. Typically, in any given year, only a certain percentage of the original face amount can be put back, normally one percent, possibly two percent.

There are other features that complicate the

analysis. One is, as we discussed earlier, most of these bonds are also callable so the issuer also has an option; and another complicating feature, which is described in my article that you have just referred to, is that the underwriting fee on these bonds is usually much higher than it would be for standard institutional bonds.

So essentially, you want to have an apples to apples comparison of institutional deals to these estate-put bond deals, and this patent basically developed the technology for that comparison.

Q. Is this generally the technology that you used in this particular case to determine what losses, if any, the bond issuer suffered?

A. Yes. This is the technology that we used.

Q. This wasn't a formula that you came up with for the purposes of this case?

A. No, it was not. We had a calculator in place. We had been using this for our clients routinely for several years prior to acquiring the patent.

Q. Now, Dr. Kalotay, have you been inducted into an institution called the Fixed Income Analysts Society Hall of Fame?

A. Yes, I was, in 1997.

Q. Is there an actual physical location for this Hall

of Fame?
A. No, there's no physical location.
Q. You were inducted in 1997?
A. 1997. I was one of the first inductees. And it was for my work in debt management.
MR. VILKER: At this time, your Honor, the Government would move to qualify Dr. Kalotay under Federal Rule of Evidence 702 as an expert in the field of valuation of bonds with estate-put features.
MR. THOMPSON: No objection.
THE COURT: Mr. Murphy?
MR. MURPHY: No objection, your Honor.
THE COURT: All right. I find that Dr. Kalotay seems eminently qualified to testify under Rule 702.
MR. VILKER: Thank you, your Honor.
Q. Now, Dr. Kalotay, in 2012, were you retained by the Government as an expert witness in this case?
A. Yes, I was.
Q. And what was your understanding of what the Government was asking you to do?
A. My understanding was that I was asked to determine how much more it costs the certain issuers to fund their debt as a result of puts resulting from estate-puts, early retirement of bonds from estate-puts.

Q. So correct me if I'm wrong, but you were being asked to determine if any of these companies suffered losses as a result of being required to redeem these bonds at an earlier date?
A. That's correct.
Q. Now, did you have any role in the underlying investigation in this case?
A. I did not.
Q. Did you interview any witnesses who were involved in setting up these accounts or any of the account owners?
A. No, I did not.
Q. So you were not asked in any way to assume that there was fraud or other illegal conduct involved?
A. No. That never was asked of me.
Q. Is it correct that you were being asked to perform a mathematical computation of the amount of losses, if any, for all these companies in which these death-put bonds were redeemed early?
A. Yes. It was strictly to determine how much more it would cost these corporations to carry their debt as a result of the puts from these bonds.
Q. As a general matter with these bonds, if we're talking about bonds with $100,000 face value and say the maturity date is 20 years away, the company has to

pay that $100,000 in 20 years, correct?
A. That's correct.
Q. And in the meantime, they have to pay a coupon rate, three percent, five percent, whatever is set in the prospectus of the bonds?
A. That is correct.
Q. If these bonds are redeemed early under the death-put provisions, the company, instead of paying the $100,000 back in 20 years in the example I gave, would have to pay it back in the near future?
A. That is correct.
Q. So is that the essential dynamic that you were attempting to calculate is how much loss, if any, would these companies have suffered as a result of having to redeem these bonds at a much earlier date?
A. Well, that is it, but it's not quite complete because you also have to take into account that in order to repay that bond earlier they would typically have to raise additional funds and the cost of those funds have to be taken into account in computing the cost.
Q. We're going to get more into this as I show you your report, but, in essence, you were determining among other factors how much it would cost the company to raise the amount of funds to pay back the bonds that

were being redeemed early?

A. Essentially, yes.

Q. Okay. Now, did you review many statements of brokerage accounts in this case in which these survivorship bonds were being purchased?

A. Yes, we did.

Q. I want to show you Exhibit 2. Exhibit 2 is an Ameritrade statement of a brokerage account in the names of Joseph Caramadre and Donald Bortle.

And you never interviewed either of those individuals, correct?

A. No, I have not.

Q. This is from the period of April 1st, 2008, through May 30th of 2008. I want to just turn to page six of nine as an example, and the top line says: Transaction date 5/12/08. It says: By securities purchased, General Motors Acceptance Corp. And there's something called a CUSIP?

A. Yes.

Q. What's a CUSIP?

A. It's a name for every security has a -- call it it's like a Social Security number. It's a unique number owned by this company, CUSIP, which is part of Standard & Poor's.

Q. So it identifies the specific fund?

A. Identifies the security.
Q. Okay. And it says quantity 200, price 63.49, and then it says amount and it's in parentheses $126,980.
What do those numbers tell you from this Ameritrade statement?
A. Well, looking at the price of 63.49, it tells me that these bonds were trading substantially below the par value, which is 100.
Q. Two hundred, does that indicate that there were $200,000 worth of bonds that were --
A. It shows that 200 bonds each, $1,000 face amount.
Q. Okay. And what's the number 126,980 refer to?
A. That was the cost of purchase, 200 times 63.49 times 1,000.
Q. So this would indicate that the account owners purchased General Motors bonds on that day, May 12th; the bonds had a face value of $200,000, and they purchased it for $126,980.
A. Yes. This was GMAC, General Motors Acceptance Corporation.
Q. Now I want to show you Exhibit 3. Exhibit 3 is a letter from Joseph Caramadre on July 1st of 2008, less than two months later. And it says: Please accept my request for redemption of my General Motors bonds under the provision of the survivors options available for

each note. Per the list below, I am requesting redemption of the following issues. It has a CUSIP number and the amount is $200,000.

Now, that CUSIP number would refer to the specific bonds I showed you earlier?

A. I assume so. The 370, yes, it does.

Q. Just to make sure we're talking about the same bonds, it's 3704A and then -- those are the same numbers? Do you see them on page six of Exhibit 3 and Exhibit 2 with the Exhibit 3?

A. Yes.

Q. So he is seeking redemption to get the full $200,000 maturity value of this bond that he had purchased less than two months before?

A. Yes.

Q. Now I want to show you Exhibit 4. Exhibit 4, Dr. Kalotay, is an Ameritrade statement from this same account in the period of October 1st, 2008, to October 31st, 2008. And I want to go to page four of eight.

On the line where it says October 15th, 2008, it says: Securities sold, General Motors Acceptance Corp. And it says 200,000.

Does that indicate that the $200,000 was credited to Mr. Caramadre's account for those General Motors bonds?

A. Yes, it does.
Q. Was what I just showed you a similar pattern that happened time and time again in these various accounts?
A. Well, we analyzed the statements. Most of the time similar thing did happened.
Q. Were there other instances in which the bonds instead of being redeemed were resold on the market or not sold in the end?
A. I'm sorry. Could you repeat.
Q. You're saying there were other types of transactions that happened with these bonds other than pure redemptions?
A. Yes, I believe some of the bonds were sold prior to the death of the holder or prior to maturity.
Q. But for the ones that were redeemed with the death of the co-holder, this would be a fairly typical pattern that you saw in these statements?
A. Yes.
Q. Now, in determining the gain from these transactions, how would you go about doing that?
A. The gain to the investor?
Q. Yes.
A. Well, a simple way of doing it is look at the purchase price and look at the redemption value, take the difference with the caveat that you may want to

account for the time value of the money between the purchase date and the sale date. In most of these cases, these dates were very close to each other so the time value of money was not a significant factor.

Q. So in determining the gain from these transactions, other than the caveat you made with the time value of money, it's essentially what the Defendant paid for them, the difference between that and what he ultimately received when the bonds were redeemed?

A. Yes.

Q. So now I want to show you Exhibit 5. Is this a document that was prepared by the IRS agent in this case? You didn't prepare this document, did you?

A. I'm not sure I've seen this particular document.

Q. Your work was focused on the losses, not the gains, correct?

A. Yes. Our analysis involved the bonds from the perspective of the issuers, not from the investor.

Q. Okay. And this indicates here that the total gain was $11,959,824.08?

MR. THOMPSON: Judge, I'm going to object. This is not his exhibit. He didn't prepare it.

THE COURT: Well, the exhibit is in evidence so I think he's just asking what the number is on the

page, not to characterize the number --

MR. VILKER: Right.

THE COURT: -- since he didn't prepare the exhibit.

Q. My only question on this would be why wouldn't that number just be the same number as the loss?

A. Well, I have already alluded to one of the factors that I believe this number is based strictly on the purchase price and the sale price. I haven't described yet how we computed the loss so I --

Q. It's a different calculation?

A. It's a different method. If I may just make one small point, this analysis does not take into account the change in the value of the bond between the purchase date and the redemption date due to interest rate changes between those two dates.

Q. So you're saying the gain would just be determined by looking at the purchase price and the redemption price?

A. I believe this is what is done here. That's my understanding.

Q. So let me move on to what your job was in this case, which was to determine how much, if any, all these companies lost as a result of these early redemptions of the bonds.

And you indicated already that these companies were required to pay back the full maturity value at some point in the future?

A. That is correct.

Q. And as we saw here, the example I showed you with GMAC, they ended up redeeming these $100,000 in bonds within a few months after their purchase instead of some point off in the future, right?

A. Yes. That's correct.

Q. So how would you generally describe the methodology that you used to determine how much, if anything, these companies lost as a result of these bonds being redeemed years or even decades early?

A. Just on a high level, it is basically comparing two liabilities, two sets of payments. One, what if the bond remains outstanding. It may not be until maturity. I do want to quantify it for two reasons. One, these bonds are callable so if rates happen to go much lower, which is not very likely, they could be called but that's one factor that should be taken into account; but in addition, these bonds have an estate-put feature and even if they are not put today, they could be put next year or the year after or the year after so that would increase their value and that also has to be taken into account. And these are

subtle points but they should be taken into account in assessing the value of the liability, the value of the debt as it stands right now. Then I have to compare that to what it costs to replace this debt at the current rates.

Q. Okay. So when you say the amount that it costs to replace the debts, in this case, the example I gave you, GMAC had $100,000 debt that the Defendant here is calling, saying pay me back that money now. How do you figure out how much it would cost in this particular case GMAC to replace that debt?

A. So the actual cost as you indicated is actually the par value. That's what it is. But from an analytical perspective, the way you handle this is to look at the outstanding debt that we understand is its call option, is its put option and essentially value that debt based on the issuers pure end refunding rates. That's the underlying analytical method of doing it.

Q. So if this bond, let's put on just an example, has a five percent rate of return, five percent coupon rate and it costs General Motors eight percent at this period of time because of whatever fact, they're having some issues and the interest rates are moving up and for whatever reason it costs them more to borrow money

than the rate of return on the bond. How would that difference between that eight percent and five percent play out in determining how much money, if any, that GMAC lost on this bond?

A. In essence, the term is discount the remaining flows on the outstanding bond, on the outstanding five percent bond at an eight percent rate. There are some complications that I mentioned involving the optionality but that basically captures what happens. All you come up is that hundred dollars really doesn't matter in terms of calculating the amount of loss.

Q. Am I correct in understanding your opinion is that GMAC in this particular case would need to pay back immediately $100,000 on which they had agreed to be paying five percent interest but it may cost them more in interest to raise $100,000 to pay back in the first place?

A. That is correct.

Q. How would you explain this in kind of layman's terms through if you would use an example of a mortgage that we all have?

A. So suppose you have a 30-year mortgage and it has 25 years left to maturity. If the mortgage has, for the sake of argument, a rate of five percent and suddenly you are required to repay the entire principal

amount, if you don't have the money you'd have to go out and have a new mortgage and say the new rate is eight percent. So essentially, your monthly payment after the refinancing will be higher than they were before. So you look at the difference between those two amounts. It depends on the principal amount, the initial principal amount of the mortgage, and you look at how much more it costs over the remaining 25 years and you express that amount. You don't just add up. You have to discount and express it on a so-called present value basis. That's kind of it, but again even in the case of a mortgage, you may want to consider that the typical mortgage can be refinanced at -- can be repeated any time.

So even this five percent mortgage, which is currently in the example, it's at below market rates. Should rates ever go to four percent, you may want to refinance it. And that somehow has to be captured in the analysis.

Q. When you're determining the call option -- there's other aspects in this calculation that you used?

A. Yes. It's not just repaying it now versus waiting until maturity. There are things that could happen in the interim.

Q. But would you agree with me that, although there

are a number of variables, a very important variable in your analysis would be how much each corporation would be required to pay at -- would prevailing rate be the right term?

A. Yes. Prevailing borrowing rate.

Q. And that would vary from company to company?

A. Yes, it would.

Q. There's a long list of companies here. How did you go back and determine what the prevailing rate was for each of these companies back in 2007 and 2008?

A. We did not determine those rates internally. We used some information that we obtained from Standard & Poor's. They compute these rates on a regular interval by different credit classes. We looked at only two different credits. We did not try to go for every possible credit rating and investment grade and money investment grade. And we used that information in terms of spreads, how much more would an investment grade corporation have to pay for ten-year debt above what the U.S. Treasury pays. That's the type of information, and we obtain that information from Standard & Poor's and use that information to estimate the borrowing costs for the relevant corporations.

Q. Did you prepare a report summarizing your findings in this case?

A. Yes, we did.
Q. I want to show you Exhibit 10. Is this a copy of your report that you prepared?
A. Yes. Yes, it is.
Q. And it's dated July 17th of 2012?
A. Yes, it is.
Q. Now, page two, there's a paragraph that talks about determining the loss to the issuers. It should be on the screen in front of you.
A. Yes.
Q. And it talks about the issuers prevailing borrowing costs and the call options. And is that essentially what you just testified about here as the formula you were using?
A. Yes. Funding curve.
Q. And the funding curve, that referred to how much it cost each issuer to borrow at a certain time?
A. On a given date how much it costs by different maturities, because the borrowing cost for five years would typically be less than the cost of borrowing for ten years and that, in turn, would be lower than borrowing for 20 or 30 years. So we refer to a yield curve or a funding curve.
Q. And if I turn to the final page of this report, you have a little diagram summarizing the essential

factors that you used?
A. Yes.
Q. Is that basically what you are testifying about here?
A. Yes. And the key point is the fair value of the bond, which is indicated in the third box.
Q. When it says "replacement cost to issuer," is that talking about how much more it would cost then to get the money to pay off the original bond?
A. Yes. The fair value is what the bond -- what the cost of the liability is today if you leave it outstanding, if you do not have to repay it today.
Q. And then it indicates in the final paragraph that based on the calculation that you performed for the survivor-put options that were redeemed by Mr. Caramadre and others in this case, the total loss was $12.48 million?
A. Yes. It's not on this page.
Q. I want to show you Exhibit 11. Is this a chart that you prepared breaking down the losses by company?
A. Yes, it is.
Q. And is it in order of severity?
A. Yes.
Q. For instance, the biggest loss was General Motors, and they lost $4.76 million?

A. Yes. GMAC.
Q. And it adds up to $12,482,000?
A. Yes.
Q. You mentioned before Tennessee Valley Authority, and it indicates here that they lost $4,568?
A. Yes.
Q. You testified today that they were actually a client of yours?
A. They continue to be a client. They are our oldest client.
Q. Did you have any knowledge of their role in this case before any of the data were provided to you?
A. None whatsoever. And in fact, I brought this case to their attention as I did for another client, which is the Federal Farm Credit Bank System, which at the time was not issuing these securities. They began issuing them a few years later. They did not issue such bonds until about I believe 2010.
Q. Now, it says here that Tennessee Valley Authority lost $4,568? Do you see where my finger is?
A. Yes.
Q. Does the fact that a client of yours lost that money, does that have anything to do with the opinions that you reached in this case?
A. None whatsoever. I had not even realized that

they were put on this page.

Q. Now I want to show you Exhibit 12. Is this a chart that you prepared breaking down the same loss by account?

A. Yes, it is.

Q. And the accountholder on the far left column, would that be the individual who is listed as a joint account holder on these accounts?

A. Yes.

Q. And it's the same numbers, correct me if I'm wrong, just broken down by account and adds up to the same total loss of $12,482,108?

A. Yes.

Q. Now, I want to show you Exhibit 13. Is Exhibit 13 the same total losses that's broken down by brokerage house in which the accounts were opened?

A. Yes.

Q. And it indicates that the majority of the losses, more than $7.6 million came from Ameritrade accounts?

A. Yes.

Q. Now, finally, were you asked fairly recently to perform an analysis with these numbers to determine how much of those losses came from accounts -- came from bonds that were redeemed on or after July 1st of 2007? I'm showing you now Exhibit 14. Do you see that in

front of you?
A. Yes, I do.
Q. Did you just essentially go back into your data and cull out the bonds that were redeemed before July 1st, 2007, and redo the calculations?
That was a bad question.
Did you specifically look at in preparing this chart only the bonds that were redeemed after July 1st of 2007?
A. I believe so. Yes.
Q. And did that total equal $12,304,392.67?
A. Yes.
Q. And was that because an overwhelming percentage of these bonds were purchased after July of 2007?
A. Yes.
MR. VILKER: Your Honor, I have no further questions.
THE COURT: All right. Why don't we take our morning break at this point before we proceed to cross-examination.
Dr. Kalotay, you'll be remaining under oath during our break, but for now you can step down. We'll take a short break and be back by 11:30.
(Recess.)
THE COURT: Doctor, I just remind you that

you're still under oath.

Cross-examination, Mr. Murphy?

MR. MURPHY: Judge, yes. Judge, just a little out of the ordinary, Mr. Caramadre wishes to do his own cross-examination.

THE COURT: All right.

MR. VILKER: Your Honor?

THE COURT: Yes.

MR. VILKER: Mr. Caramadre is not pro se. He has an attorney. I need to check the Local Rules, but I don't think he's entitled to cross-examine witnesses.

MR. CARAMADRE: Your Honor, I'd like to argue against that. I was a practicing attorney. The Government has been working on this for almost four-and-a-half years. My attorney has been only working on it for three months. I believe I am most qualified to answer an expert that the Government has brought here with impeccable credentials the expert has.

THE COURT: I'm inclined, Mr. Vilker, under the circumstances to permit Mr. Caramadre to proceed. I think it is irregular.

It might have been preferable, Mr. Murphy, to bring it to Mr. Vilker's attention before this moment. And I think I'm going to permit Mr. Caramadre to do it

as a pro se litigant notwithstanding that he has advice of counsel. If it becomes troublesome for any reason, I think we'll go the more traditional route.

MR. MURPHY: Judge, I appreciate that. For the record, your Honor, I did not realize until a few moments ago that Mr. Caramadre was intent on doing cross-examination.

THE COURT: All right.

THE MARSHAL: Can I speak to you for a second, Judge?

THE COURT: Yes.

(Discussion off the record.)

MR. VILKER: Your Honor, we renew our objection. The case law, my understanding, and we could go back to the office and find it for your Honor, is very clear that there's no such thing as hybrid representation. You either represent yourself or you have counsel. And if you have counsel, you're not allowed to act as your own attorney. I believe Mr. Caramadre has been disbarred or is in the process of being disbarred and he's not allowed to. And our concern is ultimately he's going to argue that this was error to allow him to question a witness, that any statements he makes can be used against him, including in his sentencing next week, and this is going to cause some significant

obstacles down the road. And that's part of the reason why this Rule is there in the first place. If you have an attorney, your attorney acts for you.

THE COURT: Thank you, Mr. Vilker. And I would just observe that I -- I'm not sure what Mr. Caramadre's status as an attorney is, but in contemplating his proceeding, I am not contemplating that he is doing that in his capacity as an attorney. It would be as a pro se litigant, albeit one represented by counsel at this hearing.

Mr. Murphy, Mr. Vilker has raised some serious concerns. Can you address them?

MR. MURPHY: Judge, yes. It's my understanding that Mr. Caramadre's license in the State of Rhode Island has been suspended. I believe that to be accurate. As part of his license here, I would say that the disciplinary counsel in Rhode Island, the Rhode Island Supreme Court controls his law license. It's my understanding that that has been suspended.

Judge, this is not the trial of the matter. This is a restitution hearing. Mr. Caramadre does have expertise in this area, and he has basically insisted to me and Mr. Olen that he wants to conduct his own cross-examination of Dr. Kalotay.

THE COURT: Mr. Vilker raises a point that

really is the reason why I am now somewhat concerned, and that is that because, if you sort of go by the book, there's no question that Mr. Vilker is correct, that if you have counsel then it is your counsel who must proceed, not the individual as if they were pro se. You're either one or the other.

So I'm accepting potentially something that's off the beaten path, and Mr. Vilker's concern is that that could come back as a claim of error since it certainly is inconsistent with what's technically the right path.

So I think Mr. Vilker is making a good point, which causes me to reconsider whether it would be appropriate to allow Mr. Caramadre to engage in that examination when his statements in the course of the examination could be used against him and then he could assert error arising from that, which is an assertion that Mr. Vilker is right, it's technically off the beaten path.

MR. MURPHY: Judge, it is off the beaten path. I know in some circumstances -- I apologize I do not have the case law. I was preparing my own cross-examination so I wasn't ready for this. This case has taken some bounces off the beaten path, and the Court knows the procedural history of this case.

Judge, I would say if Mr. Caramadre insists to me and Mr. Olen that he wants to conduct his own cross-examination that he could waive any right that he has if this were ever to come back as to why he was allowed to conduct his own cross-examination. My understanding, Judge, is he is not testifying as a witness although he was listed in Mr. Olen and my objection in our response to the Court. I have no intention of calling Mr. Caramadre today during the furtherance of the bond hearing as a witness. So his cross-examination would be that, simply cross-examination.

THE COURT: Mr. Vilker.

MR. VILKER: Your Honor, just to give you some perspective on the history of this case, a similar issue occurred a few months before trial in which Mr. Caramadre had a new attorney, Anthony Traini came into the case. He was representing a Government witness at the time. Judge Smith agreed if Mr. Caramadre were to waive that conflict that Mr. Traini could represent Mr. Caramadre.

Judge Smith had an extensive colloquy with Mr. Caramadre under oath in which it was explained to him that this waiver could severely impact his rights and Mr. Caramadre indicated he's fully aware that that

was a possible consequence and wanted to proceed accordingly.

Fast forward several months and in a motion to withdraw his guilty plea hearing he's arguing to the Court that his attorneys, Attorney Traini was -- did not represent him appropriately because his loyalties were conflicted.

So this is a Defendant who has a history of kind of doing these off the beaten path, so to speak, legal maneuvers and then using them down the road as an opportunity to claim error or ineffective assistance of counsel.

So we would strongly object, your Honor. And we believe the case law that we don't have at our disposal is very clear that this is impermissible.

MR. OLEN: Your Honor, if I may?

THE COURT: You may.

MR. OLEN: I'd just like to respond to what Mr. Vilker just brought up. In the waiver hearing that was held regarding Mr. Caramadre's waiving any objection to Mr. Traini coming on board, that hearing was -- the crux of that hearing was whether or not he would waive any conflict based on his representation of Mr. Maggiacomo.

In our motion to withdraw the guilty plea, our

claim of conflict was based on the fee agreement itself. It had nothing to do with Mr. Maggiacomo. So there were really two different claims. It wasn't a case where we were trying to go back on the waiver itself with respect to Mr. Maggiacomo. It was entirely whether or not that fee agreement created a conflict. So they're really two different issues.

THE COURT: All right. I'm going to quasi-reverse myself. Here's how I'd like to proceed. Let's proceed with traditional cross-examination by counsel. I suspect we'll get to our lunch break before that's completed.

Mr. Murphy, you indicated you had some case authority to bring to my attention potentially? No?

MR. MURPHY: Judge, no, but I'm aware that there have been people that have given their own summations. This is not a case with a jury. I believe Mr. Vilker said that he had some case law.

MR. VILKER: I need to find it but --

THE COURT: Anyway, I will take into consideration anything that you can bring to my attention; and if after lunch we can review the law on this issue, if Mr. Caramadre is not satisfied with the cross-examination and believes that there are remaining issues that he would like to cover, I'll revisit

permitting him in effect of a third, so Mr. Murphy will get a shot and Mr. Thompson will get a shot and then if I conclude that it appears appropriate, Mr. Caramadre.

I will say that Mr. Vilker's argument about a latter argument coming back and asserting error arising from permitting Mr. Caramadre to conduct the examination is a significant concern to me. I hear Mr. Olen's presentation regarding whether or not the colloquy on the Traini conflict ended up being precisely the same thing and I think there clearly was a difference, but this certainly is a case where there was a plea colloquy and then a withdrawal so that we do have some history in this case that I think justifies the concern raised by the Government.

MR. VILKER: The only thing I would add to that, your Honor, is we disagree with what Mr. Olen said. Mr. Caramadre clearly in the briefs and I believe in argument attempting to withdraw the guilty plea was arguing that Mr. Traini's interests were conflicted because he was looking out for the interests of his other client, Mr. Maggiacomo. So I think it's pretty much an apples-to-apples type situation.

THE COURT: All right. So for now we will proceed down the traditional road. Mr. Murphy?

MR. MURPHY: Judge, I had one last comment based

on what the Court just said.

THE COURT: Yes.

MR. MURPHY: Judge, Mr. Caramadre pointed out to the Court that I had been involved in this case for approximately a little over three months. By my count, I'm either attorney number seven, eight or nine for Mr. Caramadre. I know Mr. Caramadre has jotted down some notes during Mr. Vilker's direct examination of Dr. Kalotay. I would ask, Judge, for a little patience from the Court, if possible, because this afternoon if the Court finds that the Court will not allow Mr. Caramadre to cross-examine, if during and when I'm ready to complete my cross-examination if I may confer with Mr. Caramadre and Mr. Olen to see if there are other questions that Mr. Caramadre asks.

THE COURT: Absolutely. Including if you wish to take a break before you close your cross-examination, that's fine.

MR. MURPHY: Thank you, Judge.

CROSS-EXAMINATION BY MR. MURPHY

Q. Dr. Kalotay, good afternoon, sir.

A. Good afternoon. Morning.

Q. It's still morning. Feels like afternoon.

Doctor, you were hired by the United States Attorney's Office to do your study as it pertains to

bonds in this case?
A. Yes.
Q. Okay. And when was your first contact with the United States Attorney's Office, sir?
A. It must have been in the spring of last year sometime.
Q. The spring of 2012?
A. 2012, yes.
Q. And to date, you have been paid how much, sir?
A. I am not sure. I believe it's about a total probably around $24,000, I believe.
Q. And that was paid to you at a rate of $450 an hour by the Government?
A. Some of it was paid to me at that rate, and the rest of it was paid at lower rates for the people who were doing the analysis.
Q. Who were the people doing the analysis?
A. I have two employees who were working on this, Leslie Abreo and Radek Wyrwas.
Q. So Leslie and Roderick --
A. Radek, yes.
Q. -- Radek are the people that actually did the analysis?
A. They are the ones who crunched the numbers.
Q. You didn't crunch the numbers?

A. No, I did not.

Q. So you're just taking what they gave you?

A. Yes.

Q. Now, sir, Mr. Vilker on his direct examination gave you an exhibit which has 14 tabs, Government's 1 which contains numbers 1 through 14, and you have that in front of you, do you not?

A. I do.

Q. When was the first time that you saw this bound booklet, sir?

A. This morning.

Q. When was the last time prior to testifying that you spoke to Mr. Vilker about your testimony?

A. I spoke with Mr. Vilker last Wednesday. Wednesday, I believe. He had a specific question about a document.

Q. Now, you were hired prior to the start of Mr. Caramadre's trial in this matter?

A. I'm not sure what the official trial date was. I can't comment on that.

Q. Well, you said you were hired last spring, meaning 2012?

A. Yes.

Q. So you were in place working for the Government prior to October and November of 2012, correct?

A. Yes, I was.

Q. And in 1990, you stated on direct examination that you formed your own business, Andrew Kalotay and Associates, correct?

A. Yes.

Q. And you've been based in New York City since 1990?

A. Yes, I have been.

Q. And part of your job with Kalotay and Associates according to what you said on direct examination is that you advise issuers, correct?

A. Yes.

Q. And that is bond issuers, correct?

A. Bond issuers, generally, yes.

Q. Okay. And have you been advising bond issuers since 1990?

A. Yes, I have been.

Q. And when you advise them, do you advise them as to setting up a prospectus with a bond indenture?

A. No, I do not get into the indenture normally. That's not my area of expertise.

Q. Do you get into the prospectus at all.

A. I am familiar with prospectuses, but I don't really look at prospectuses. I focus on refunding provisions and maturities, analytical concepts.

Q. When you -- I'm sorry, sir. You focus on

refunding?

A. Yes. On refunding provisions, so-called embedded options in a bond.

Q. Okay. So you have nothing to do with getting that bond from an issuer ready for market?

A. No, I don't.

Q. You have nothing to do with getting that bond ready for sale on the retail market?

A. None whatsoever. I do not have any interaction with the underwriters.

Q. Just on the refund, on refund provisions, correct?

A. Refunding and maturities.

Q. Refunding and maturities?

A. And maturities. Underwriting fees.

Q. Underwriting fees. Okay.

Now, Dr. Kalotay, you would agree with me that there are four ways to retire a bond, correct?

A. I'm not sure what you mean.

Q. Well, for a company that issues a bond, the prospectus travels with that particular bond from cradle to grave, correct?

A. There's a prospectus associated, there's an indenture associated with every bond, yes.

Q. Right. And that prospectus follows a particular bond until that bond is retired, correct?

A. I'm not sure what you mean "follows it." It's associated with the bond.
Q. Well, the prospectus is the bible of that bond, correct?
A. That's correct.
Q. And it follows a particular bond from cradle to grave, correct?
A. Every bond has a prospectus.
Q. Now, you can retire a bond by when a particular bond reaches maturity, correct?
A. Correct.
Q. A bond can be called by the issuer?
A. Correct.
Q. If there is an option on a bond, the owner of that bond can put it to the company, correct?
A. What you're referring to is a straight put without the estate-put, correct.
Q. And then there's the matters which are complicated would be with a court or a bankruptcy court or something like that, correct?
A. Well, that's correct. But there are some other things like sinking funds and more complicated features that --
Q. We'll get to sinking funds in a minute, sir.
A. That's fine.

Q. Now, when you spoke about two bonds in the exhibit that Mr. Vilker gave you --
A. May I ask you a question? Because you mentioned four and I'm still at a bit of a loss. What are those four? Just so that we're on the same --
Q. A bond reaches maturity; it's called by the issuer; in this case there's an estate-put; and fourth is something that we don't have to deal with here, if there's a bankruptcy proceeding or a court proceeding.
Now, I would ask you to look at Exhibit Number 12.
Sir, Number 12, which is part of Government's Exhibit 1, says "Loss By Accountholder." And the second column it says, "Joint Accountholder," and it has a person's name. Are you the one that compiled this data?
A. I did not do this personally.
Q. Sir, if you can look at Exhibit Number 11, where it says, "Loss By Issuer" in Government's Exhibit Number 1, part 11, are you the one that completed that data?
A. No, I did not.
Q. And Government's Exhibit Number 1, Section 13 --
MR. MURPHY: Judge, I'm sorry.
THE COURT: Probably can do without it since

we've all got the compilation.

It's back.

Q. Now, that Section 13 of Government's 1, it says, "Loss by Brokerage." Did you, Dr. Kalotay, compile that data?

A. No, I did not.

Q. Now, where it says "Loss by Brokerage," that would refer to the brokerage house?

A. Well, it's the accounts with the particular brokerage house.

Q. The accounts that are held?

A. That are held in the brokerage house.

Q. Right. Are you saying that the brokerage house actually lost money?

A. No, I do not.

Q. So it shouldn't say "Loss By Brokerage"?

A. It's the loss of accounts by brokerage.

Q. Loss of accounts by brokerage?

A. It's the accounts that lost money by the various -- and it's sorted by the brokerage.

Q. Well, looking at number two from the bottom, Charles Schwab didn't lose money? They made money by conducting sales, correct?

A. Schwab didn't make or lose money in this case. They may have gotten some very small fees associated

with the trading. The accounts residing with Schwab were the ones that gained or lost money depending on how you look at it. The loss here is from the perspective of the issuers whose bonds were held in these accounts.

Q. Okay. But it's not a loss by the brokerage?

A. It's definitely not by the brokerage.

Q. Now, sir, going back to Exhibit Number 11, you had mentioned when Mr. Vilker had asked you that you represent Tennessee Valley Authority, which is the fifth bond issuer listed from the bottom, correct?

A. I am an advisor to Tennessee Valley Authority.

Q. And there must be on that page 20-plus bond issuers. Did you look at the prospectus for the bond issuers that are contained in Section 11 of Government's Exhibit 1?

A. I did not look at prospectuses.

Q. Okay. So as it relates to Government's Exhibit 1, Section 11, Table 1 that says "Loss by Issuer," there's over 20 bond issuers, correct?

A. Yes, it is.

Q. How many to be exact , sir?

A. I'm not sure how many exactly.

Q. Can you count the bond issuers quickly to yourself.

A. Looks like 33.

Q. Thirty-three? Okay. Now, those are 33 bond issuers?

A. Thirty-three issuers, yes.

Q. Sir, there are not 33 bond issuers. Some of those are CDs, correct?

A. There are 33 corporations listed here. Thirty-three names listed here.

Q. You just said they were 33 bond issuers.

Let me ask you this way, Dr. Kalotay. I'll rephrase the question.

Are you aware of the 33 issuers that you just counted that some of those issuers pertain to CDs and not bonds?

A. I believe some of them are CDs but CD structure very much like --

Q. Did you know prior to this morning that there were CDs in Government's Exhibit 1, Section 11?

A. I believe it was called to my attention before, yes.

Q. But I thought you said you weren't the one that compiled this data?

A. No, I'm not. No, I was not the one who compiled it, but I discussed it with my two colleagues who were working on this.

Q. So you just said a moment ago that CDs are the same as bonds?
A. CDs are debt instruments from the prospective of the corporation.
Q. They're not securities?
A. They are normally not securities.
Q. Now, sir, Mr. Vilker had showed you and I believe at first you didn't recall the name of the article that you wrote in 2006 of "Some Bonds Are Worth More Dead Than Alive"?
A. I recall it. It's in here.
Q. Right. But at first you didn't recall the name of it, did you?
A. No. The question, I believe, pertained to the article I wrote in 2009 and not in 2006, which is a longer title.
Q. What article did you write in 2009 that's in this exhibit?
A. The article -- it's not in this exhibit but it's listed under my qualifications, and the article is something like "Estate-Put Bonds Value Lies in the Eyes of the Beholder," or something along those lines. But that's not the 2006 article. It's the 2009 article.
Q. So if I can refer you to the article that you wrote in 2006, "Some Bonds Are Worth More Dead Than

Alive," can you go through the exhibit and find that article, please, sir?

A. Can you tell me --

Q. It's number 7.

A. Number 7. Yes.

Q. Okay. That article deals with estate-puts, correct?

A. Correct.

Q. And estate-puts can be called death bonds or death-puts, correct?

A. Yes. Or survivor options is another way of describing them.

Q. You don't like to use the name "death-put," do you, personally?

A. I don't personally use them, no.

Q. I'm not saying --

A. No. No. I don't like to use them. It's a way to explain these bonds in terms of the old Treasury bonds, which were referred to as death-put bonds. That's kind of the chronology of it.

Q. You don't like to use that vernacular of "death-put." You like to call it an estate-put --

A. Estate-put.

Q. -- or survivor option, correct?

A. Or survivor option, yes.

Q. Now, you had mentioned that when you wrote this article you were not aware that these bonds could be held by joint tenants?
A. I was not aware of that.
Q. When did you first become aware that these bonds could be held in a joint tenancy?
A. I learned about this in the context of this particular case.
Q. So sometime in the spring of 2012?
A. Yes.
Q. That's the first time you became aware of it?
A. That's the first time.
Q. So when you wrote this article in 2006, you did not know that people were using the death-put option as an investment vehicle?
A. I did not know that. As a joint account?
Q. Yes.
A. I did not know that they would be having joint accounts.
Q. And you've been dealing with bonds since before the 1990's, correct, sir?
A. That's correct.
Q. And in this article, you talk about you went back to old time U.S. Treasury bonds, correct?
A. That's correct.

Q. And they were known as flowering bonds?
A. Flower bonds.
Q. And the flower bonds would come to be flowering, but in 1998 they did away with them, correct?
A. That's correct.
Q. And you said they were similar to these bonds?
A. In the sense that they could be put back at par, or more precisely they could be used at par value against estate taxes upon the death of the holder.
Q. Well, that's a bit different because the reason why flower bonds went out is because when you bought a flower bond you did not buy it at par value, there was an accretion rate, correct?
A. I'm not sure. You may be right on that but my recollection is that they would be sold with below market coupons so a Treasury could be -- regular Treasury were issued for sake of argument at ten percent, these flower bonds would bear a lower coupon, say eight percent.
Q. There was nothing illegal about flower bonds?
A. There was nothing illegal about flower bonds, that's correct.
Q. They went away because the Government had to pay face value for a bond that had sold much less than face value, correct?

A. I am not sure why they were discontinued.
Q. Can you look through your article about "Some Bonds Are Worth More Dead Than Alive" and tell me why they were discontinued?
A. I'm not sure what you're referring to here. I'm looking at the first page. Can you direct me specifically?
Q. Yes. I was looking at what is an estate-put where you mentioned flower bonds and flower bonds actually went away in 1998. I'm asking you if you know why they are not offered anymore?
A. And I indicated that I do not know, and I thought you told me that it was somewhere here and I cannot see any -- maybe I'm missing some reference to it.
Q. Now, on an estate-put bond, going back to your expertise as a person who advises issuers, when a bond is issued, I believe you said your expertise was in the refunding of money as it pertains to the issuance of a bond?
A. Structuring of bonds and bond management, debt management. The expression I would like to use is cradle to grave.
So when you structure the bond, you have to take into account all kinds of contingencies that might arise during the life of the bond, including calls if

it's callable, puts if it is puttable. And all of these things have to be accounted for in analyzing the bond and determining what is its expected cost.

Q. And you had just mentioned the term that was used previous, cradle to grave, correct? And that's your expertise on how to advise bond issuers about debt management of particular bonds, correct?

A. Correct.

Q. And the people that you've worked with, the companies that you've worked with that have issued bonds have taken your advice on debt management from time to time, correct?

A. They rely on me from time to time, yes.

Q. And part of the debt management relates to estate-puts or death-puts, correct?

A. The decision to issue bonds with or without death-puts, yes.

Q. Well, the decision to issue bonds is not your decision. It's the company's decision, correct?

A. The decision is the company's decision but often we do the analysis that compares the expected cost of a bond with an estate-put with that of a regular institutional bond.

Q. Okay. Now, the estate-put bond or an estate-put bond is not a -- it's a retail bond, correct?

A. It is for retail, correct.
Q. It's not an institutional bond?
A. Correct.
Q. There would be no reason for an institution to buy a bond with a death-put, correct?
A. Correct.
Q. And a death-put makes a particular bond attractive to a retail investor, correct?
A. Correct.
Q. Now, how long have you been working with companies who issue bonds as an advisor who deals with risk management?
A. In general?
Q. In general, sir.
A. I have been working in this area since the time I joined the Treasury organization of the American Telephone and Telegraph Company, and that was in, I believe, September of 1974. At the time, AT&T was the world's largest corporate issuer of debt.
Q. Now, sir, can you estimate how many bond issues you have worked on or have advised on?
A. In issuance and refunding, hundreds.
Q. Hundreds?
A. Hundreds.
Q. And out of those hundreds, how many have you dealt

with as it relates to estate-puts?

A. Very few. Very few.

Q. Give me a number, please, if you can.

A. I would say probably -- let me say ten, but let me also add that earlier today we referred to some calculators that my company developed, and those calculators are made available to our clients who, in turn, use those calculators to determine whether or not to issue bonds with estate-put, so there's a connection.

Q. I haven't asked anything about your calculator.

A. That's fine.

Q. I'm just asking when did you first become involved with companies as it relates to the issuance of bonds where you provide advice and they concern estate-puts?

A. Well, I have been working in this area advising companies on debt management since 1974, and I have been involved in analyzing the estate-put provision since I believe 1994 when I first came across this structure as an advisor to the Tennessee Valley Authority.

Q. So with the Tennessee Valley Authority in 1994, that's when you first became aware of estate-put bonds?

A. I believe so. I'm not sure about the year, but I became aware of estate-put bonds through my

association, through my consulting for the Tennessee Valley Authority.

Q. And in the market, in the economy when interest rates decline, you advise issuers to call their bonds, correct?

A. Yes.

Q. Now, sir, generically, an issuer of a bond, take General Motors because that was number one on the list of exhibits, when General Motors issues a bond, they sell those bonds for face value, correct?

A. These retail bonds are typically sold at face value. Other bonds, institutional bonds can be sold at a different price.

Q. But we're talking in Exhibit 1 of retail bonds, correct, sir?

A. Correct.

Where are we here? Can you please direct me to what section we are looking at.

Q. Sure. If you want to go back to a section, sir.

THE COURT: Mr. Murphy, I believe each of the 14 items are separate exhibits.

MR. MURPHY: Judge, I apologize. I thought they were part of a group exhibit.

THE COURT: No problem.

Q. Okay. Exhibit number 11, sir, those are retail

bonds, correct?

A. These are all retail bonds, yes.

Q. Actually, we just said that some of them are CDs, correct?

A. Held by retail.

MR. MURPHY: Judge, if I can have Defendant's 2 marked for identification.

THE COURT: Maybe we should mark it as Defendant's B.

MR. MURPHY: As B. That's fine, Judge.

And Judge, this would be in Mr. Olen's submission as the 2005 General Motors prospectus.

THE COURT: Okay. Good. I have a copy.

MR. MURPHY: Thank you.

(Defendant's Exhibit B marked for identification.)

Q. Dr. Kalotay, I have placed in front of you and I would ask if you see is a document which is a prospectus from General Motors Acceptance Corporation. Do you have that in front of you?

A. I see part of it.

Q. Is that better, sir?

A. Yes, please.

Q. Now, did you review this prospectus when you did your analysis of losses?

A. I did not.
Q. And sir, a bond prospectus is a contract of adhesion between the issuer and the purchaser, correct?
A. Correct.
Q. The bond issuer makes all the rules, correct?
A. I'm not sure what you mean by the bond issuer making --
Q. The rules as to how the bond is going to be redeemed, how it's going to be sold?
A. Well, it's negotiated.
Q. Well, it's negotiated in that it's sold, correct?
A. It's a result of some negotiation.
Q. As a hypothetical, as Mr. Vilker pointed out this morning, I can't go to General Motors and say I want to buy a hundred thousand dollars worth of your bonds in this $15 billion indenture and say I want to change the rules, can I?
A. Not once the bonds have been issued.
Q. Right. So this prospectus goes from cradle to grave with issued bonds, correct?
A. Correct.
Q. The purchaser of the bonds cannot change the prospectus, correct?
A. Nor can the issuer.
Q. Who makes the rules for the prospectus? Who sets

the terms, sir?
A. It's negotiated prior to the issuance of the bonds.
Q. Negotiated by who?
A. Normally, it's negotiated between the -- again, this is not my area of expertise. I do want to emphasize that, but it's negotiated between the issuer and the underwriter of the bonds.
Q. Not the retail customer, correct, sir?
A. No. The retail customer has some indirect input into this via the underwriter.
MR. MURPHY: Judge, may I approach the witness?
THE COURT: Yes.
Q. Dr. Kalotay, I'm approaching you because I can't seem to make the screen larger. I'm handing you page 30 of Defendant's Exhibit B for identification and would ask if you would look at page 30.
Down the bottom of the left side, sir, it deals with the estate-puts, correct?
THE COURT: Mr. Murphy, excuse me, just a question. On the copy of the exhibit that I have, there's a page 30 that's handwritten down the bottom and then there's a page 28 that's typewritten on the document. Which page number are you referring to, the typewritten?

MR. MURPHY: Page 30? It should be in the middle of the page, Judge, the number.

THE COURT: The middle at the bottom?

MR. MURPHY: Yes.

THE COURT: So it's the typewritten number, not the handwritten number?

MR. MURPHY: Yes.

THE COURT: Okay. Thank you.

Q. And there's a section in this particular prospectus that deals with payment upon death, correct, Doctor?

A. Yes, it is.

Q. And I'd ask if you could take a moment just to peruse through that paragraph.

A. The first paragraph immediately under --

Q. Where it says "Payment upon death," that section on page 30, both the left bottom paragraph and the paragraphs on the right-hand side of that page.

(Witness read document.)

THE COURT: Fair amount of material, Mr. Murphy, to read on the fly.

A. All right.

Q. Now, Doctor, that death benefit is actually part of the prospectus that travels with any tranche of bonds until it's retired, correct?

A. Yes.
Q. Now, sir, those terms as you've just agreed with me are set by the issuer and the brokerage house before they're offered for sale on the open market, correct?
A. By the underwriter and the issuer, yes.
Q. And you've already said that myself as a purchaser could not change those terms once the bond is issued and the prospectus travels with it, correct?
A. That's correct. Nor could the issuer. It's a contract.
Q. Okay. I either can purchase that GMAC bond and abide by the contract, or I have the choice not to buy that bond, correct?
A. That's correct.
Q. And as it relates to a death-put or an estate-put, those are the terms and conditions of how I can put that bond upon the death of a joint tenant or owner, correct?
A. Correct.
Q. And when you advise companies as part of your debt management, there's always a percentage of the total bond indenture that is set aside for an estate-put, correct, if they are estate-put bonds?
A. I'm not sure what you mean by "being set aside."
Q. In other words, that prospectus on page 30 that

you have in front of you that deals with the October 7th, 2005, issuance of $15 billion of General Motors bonds says that one percentage point must be set aside for estate-puts during a calendar year, correct?
A. Where do you see the phrase "being set aside"? I'm not saying it's not here but --
Q. "Set aside" is my word.
A. That's your word. All right.
Q. It's one percent.
A. Just for the sake of clarity, to the best of my knowledge, no money is being, quote, unquote, set aside.
Q. Well, I'm not talking about sinking funds or anything like that. I'm just saying that one percent is there as the risk that will be claimed in a calendar year, correct?
A. One percent may be put, but I think you implied that the corporation assumes something in anticipation, the way I hear you. Or I'm misunderstanding what you said.
Q. The issuer and the underwriter determine the prospectus, and it says: "A survivor's option will be accepted in any calendar year to one percent of the outstanding aggregate principal amount of the note of the end of the most recent fiscal year but not less

than $1,000,000 in any such calendar year." That's the amount of money that a company will allow to be estate-put, correct?

A. That is the amount according to the prospectus, yes.

Q. And the company is the one that sets that amount?

A. Again, I'm sorry. This is part of a contract which was set prior to the issuance of this bond by the underwriter and the company. It's not the company decides. It's an agreement between the underwriter --

Q. And the company?

A. -- and the company. It's just the way you express it, you kind of imply that there's an arbitrariness and the company is doing it. In fact, it's the result of a negotiation.

Q. Between the company and the underwriter?

A. If I may point out, it's one percent here. In some cases, I believe it can be as high as two percent. There are some variations on this.

Q. The one that you saw in Defendant's Exhibit B is one percent, correct?

A. Yes, please.

Q. And there are certain rules that a company and underwriter will put in the prospectus as to an amount and rules that have to be followed before somebody can

use a death-put option, correct?
A. Well, you call them rules. Bonds are man-made. These are results of negotiations. The rules are man-made.
Q. Okay. So the result of negotiations are there are rules that follow a particular tranche of bonds, correct?
A. Correct.
Q. You'd agree with me that the customer doesn't set those rules, your retail customer, sir?
A. The customer does not set -- the customer does have an input into that, however, via the underwriter.
The customer, the buyer, the retail buyer does not set those rules directly, but the buyer does provide some input into the structuring via the underwriter.
Q. And the bonds that we have dealt with here in Government's Exhibit 11 are retail bonds, correct?
A. That's correct.
Q. And these retail bonds are death-put bonds. They have that option, correct, sir?
A. They have the option, yes, they do.
Q. And the death-put options that are contained in Government's Exhibit Number 11, those death-put options are negotiated by the underwriter and the issuer,

correct?
A. Yes. Prior to issuance.
Q. It doesn't change, does it, sir?
A. It does not change.
Q. Sir, there's nothing illegal about death-put options, is there?
A. Not to my knowledge.
Q. And a death-put option assists the issuer in the marketability of bonds, correct, sir?
A. That's correct.
Q. And estate-put options on bonds were around well before your article in 2006?
A. That's correct.
Q. Now, sir, when you were contacted in this case, who was the first person from the Government that contacted you?
A. I believe I got a phone call from Mr. Vilker.
Q. In Exhibit Number 11, according to what you stated on direct examination, what you categorized as loss is approximately $12,400,000, correct?
A. That's correct.
Q. And you did not read the prospectus on any of those bonds contained in Exhibit 11, did you, sir?
A. That is correct. I did not read any of them.
Q. And prior to this morning, you did not know that

some of these articles in Exhibit 11 were CDs?
A. No, actually, I did know.
Q. You did?
A. I believe I heard it, yeah.
Q. Where did you hear it, sir?
A. From my colleagues who looked at these. I couldn't swear by it but that's my recollection that I did.
Q. But you didn't say it this morning when Mr. Vilker was asking you questions, did you?
A. No, I didn't say it this morning, no.
Q. You never saw this list prior to this morning, correct?
A. I don't believe I've seen it.
Q. Then how do you know your colleagues were talking about it?
A. They were looking at the brokerage accounts.
Q. Now, sir, referring back to Exhibit 11 where you have "Loss by Issuer" is the headline, Table 1, what issuer out of the -- well, a CD is redeemable on the spot, correct?
Let me rephrase that.
MR. MURPHY: Judge, I'll withdraw the question.
Q. To redeem a CD on a death-put, you don't have to go through the rules that are in the prospectus,

correct?
A. I don't know that. I'm not familiar with the provisions, death-put provisions of CDs.
Q. Well, a CD is controlled by the FDIC, correct?
A. I believe it's correct, but I'm not an expert on the money market instrument.
Q. Okay. So you're not an expert and you can't answer, so out of the 33 items contained in Exhibit 11, Government's Exhibit 11, you don't know how many CDs there are, do you?
A. I do not.
Q. And you didn't take that into account when you did your analysis, did you?
A. No, I did not.
Q. I'm sorry, sir. I didn't hear you.
A. No, I did not, no.
Q. You did not.
A. No.
Q. Now, through your study and writing and advising on death-put options, you know that companies allow a percentage of the outstanding float to be put in a calendar year, correct?
A. You use the term "float." The outstanding face amount.
Q. The outstanding face amount?

A. Yes.

Q. And you know that through your expertise, your advisement dealing with issuers and so forth and your writing on estate-put bonds, correct?

A. I know that as I state in my article it's normally one percent. There are variations on it, but it typically assumes one percent of the original face amount.

Q. But you knew that before testifying today?

A. Sure. That's part of our analysis. That's one of the assumptions that we use.

Q. Okay. And you know companies or issuers, I'm using them as one, issuers also limit per estate the amount of a put that can be placed, correct?

A. That's correct.

Q. Okay. And that's risk that's taken into consideration by a company before it sells such bond, correct?

A. That is correct.

Q. So they know going in, companies know going in, and you know this through your expertise, that a company that is going to sell a bond on the retail market knows in any given year percentagewise between one and two percent of the bonds can be put because of the estate option that is contained in those bonds,

correct?
A. There's a maximum that they legally have to accept, correct.
Q. And there is a limit on the number of bonds or the amount of face value of the bond that can be put by an estate or a joint tenant, correct?
A. Yes. That's correct.
Q. And sir, those are rules that the company knows or the issuer knows ahead of time before bond one is sold, correct?
A. That is correct.
Q. Now, in Exhibit 11, not the CDs but the bonds, which company hit their annual estate-put limit in the year that Mr. Caramadre, et al, redeemed his estate-put bonds?
A. I do not know.
Q. You don't know?
A. I don't know.
Q. It was never researched?
A. No.
Q. Sir, Defendant's Exhibit B --
MR. MURPHY: Judge, may I approach the witness again?
THE COURT: Yes.
Q. Handing you that prospectus, sir, what is the face

amount of that prospectus?

A. Fifteen million.

Q. Excuse me?

A. Fifteen million dollars. Oh, I'm sorry. It's fifteen billion. Hang on. What's going on here? What happened here?

Q. Fifteen billion, correct?

A. Fifteen billion, yeah.

Q. Now, look at Exhibit 11. What is the first company listed in Exhibit 11?

A. GMAC, General Motors Acceptance Corporation.

Q. What is one percent of 15 billion, sir?

A. It's 150 million.

Q. Well below 4 million, correct?

A. Yes.

Q. Can I have the exhibit back, please.

So sir, I'm not going to go through every one, but on Exhibit 11, prior to today you never went through the prospectus on the General Motors Acceptance Corp bonds that were redeemed pursuant to a death-put by either Mr. Caramadre or his associates, right?

A. That's correct. I did not go through -- in fact, I didn't go through any prospectuses.

Q. Okay. As it relates to American General Financial, which I believe is number six or seven on

that list, you did not go through the prospectus as it relates to the put of the estate-put by Mr. Caramadre or his associates, did you?

A. No, I did not.

Q. As to the 33 items contained in -- 33 is the number you gave me in item 11, you don't know -- I'm not talking about the CDs, but you don't know when those bonds individually would have matured, do you?

A. Not from here, but we did look at the individual bonds that we analyzed bond by bond.

Q. You looked at them?

A. Oh, absolutely. Our results are based on bond-by-bond analysis.

Q. And you didn't include that in your writings that you submitted to the Government, did you?

A. We did not.

Q. And as we relate to the CDs contained in Exhibit 11, those CDs with estate-put options or death-put options are redeemable upon death provided that a person shows satisfactory conditions of death, correct?

A. Evidently. So as I indicated before, I'm not an expert on CDs.

Q. But you have CDs in what you've adopted to determine loss, correct?

A. Sure. We use them and we computed what they would

cost had they not been put and computed damages based on that.

Q. Sir, we looked in Defendant's Exhibit B a $15 billion bond issuance from General Motors Acceptance Corporation, and in Exhibit Number 11 you say that there were $4 million in losses that GMAC suffered. Do you know if GMAC had to go out and borrow for the $4 million, sir?

A. If I may say, that's not a $15 billion bond issuance, what you showed me. That's not a single issue.

Q. That's the prospectus?

A. That's a prospectus for many issues. Many, many issues.

Q. Right. It's not a tranche, a particular tranche of bonds.

A. Yeah. Many issues. And they didn't have to issue $15 billion. Maybe they issued much less. Who knows. So that's a general prospectus that governs potential issues.

Q. It covers the particular tranche of bonds that are sold under that prospectus?

A. That may be sold.

Q. Means a company doesn't have to sell all 15 billion?

A. That's right.
Q. But any amount of the bonds that that company sells within that prospectus has to abide by the prospectus, correct?
A. Under that particular indenture provision, yes, please.
Q. Now, sir, today you would agree with me -- today, when I say today, I mean September 30th of 2013, the interest rates on bonds are lower than they were in 2008, correct?
A. Treasury rates in general, yes.
Q. And do you know, sir, if these companies listed in Exhibit 11 had to go out and borrow money to satisfy the estate-puts? You don't know that, do you, sir?
A. I don't know that. I don't know how they -- where they got the cash.
Q. So your formula is not based on the particular company's funding index?
A. It is based on the individual company's funding index, and we referred to that earlier as the yield curve appropriate for the particular issuer.
Q. But you don't know if they had to go out and borrow money to satisfy the puts that were placed by Mr. Caramadre and his associates , correct?
A. We do not know where they got the quality rate for

cash, but we can value the liability associated with the bond, which has been redeemed. In other words, we can estimate how much it would have cost them to service that particular bond had it not been redeemed.

Q. Who said they had to replace the money?

A. They need -- companies typically need cash to run their business. The more expenses they have, the more cash they need to borrow.

Q. And it's anticipated in the prospectus with a ceiling of how much cash they may have to outlay in any given year because of the risk associated with the selling of an estate-put, correct?

A. For these structures, it is correct.

Q. As it relates in Exhibit 11 to GMAC, on those bonds, what was their annual put limit?

A. Well, according to the document, our assumption was it was one percent.

Q. Do you know if the bonds that were redeemed as estate-puts by Mr. Caramadre and his associates were part of that tranche of bonds?

A. Which tranche? What are you referring to?

Q. The ones that I showed you? The prospectus from 2005?

A. I have assumed they were, but I couldn't swear on it. I would assume so. I assumed they were subject to

this one percent limit.
Q. Could have been bonds from 2003, correct?
A. Could be, yes.
Q. Could have been bonds from 1998?
A. Could be.
Q. Sir, Mr. Vilker asked you this morning about bonds, in essence, that were sold for a loss on the retail market. So if I were to buy $100,000 worth of GMAC bonds with a 30-year maturity and two years from now I sold them, there's a possibility that I would have to sell them on the retail market for less than what I paid, correct?
A. That is correct.
Q. And the individuals that -- and when I say Joseph Caramadre, et al, that's because that's the phrase that you used in your writing when you were describing JAC, et al. That's Mr. Caramadre, correct? You've never met Mr. Caramadre, have you?
A. No, I have not.
Q. The Government told you that Mr. Caramadre had your article "Some Bonds Are Worth More Dead Than Alive" on his hard drive, correct?
A. Correct.
Q. When did they tell you that, sir?
A. It was certainly mentioned in the document that I

received a few months ago, but I believe orally Mr. Vilker may have mentioned it to me earlier, but it was certainly much after the initial engagement.

Q. They told you they had the Defendant's -- the Defendant had your article on his computer, correct?

A. Correct.

Q. So you don't know with respect to the bonds indicated in Exhibit 11 whether any of those companies hit their put limit in the year that they were redeemed, correct?

A. Correct.

Q. In fact, do you know from your research that Mr. Caramadre and his associates actually lost money on some bond issues?

A. What we did see in the brokerage statement is that there were some sales at prices below the purchase.

Q. Did you see it anywhere else, sir?

A. I don't recall.

MR. MURPHY: One moment, please, Judge.

Q. So when you saw that Mr. Caramadre had lost some money with bond trading with estate-puts due to your investigation of brokerage statements, that's because Mr. Caramadre and his associates assumed a risk when they purchased the bonds, correct?

A. I did not pay any attention to trades related to

other than estate-puts. Our focus was to estimate -- we were asked to estimate the damage, the extra cost to the issuers, so secondary market trading was irrelevant for our purposes.

Q. Well, that's where Mr. Caramadre and his associates bought the bonds, on the secondary market, right?

A. Yes. And as I'm saying, we did not care about sales in the secondary market.

Q. It was irrelevant to you?

A. It was irrelevant to us, yes.

Q. Now, when a bond comes for sale on the secondary market, the issuer has already received full face value for that bond, correct?

A. You mean at issuance?

Q. Yes.

A. Well, whether or not it comes up for sale on the secondary market is irrelevant. When the bond is sold, the issuer receives --

Q. So if the bond is sold for $100,000, the company receives almost $100,000 for that, right?

A. You mean when the bond is issued?

Q. When it's issued, sir, yes.

A. Typically on these bonds, the corporation issuing receives the full face amount, which is hundred percent

less of issuance fees.

Q. Which come out to be incidental?

A. Yes, it depends, but it's substantial.

Q. Now, when Mr. Caramadre and his associates purchase on the secondary market, they'll, according to your study, they purchased bonds that were well reduced, correct? The purchase by Mr. Caramadre with the example that Mr. Vilker gave you of a GMAC bond that you went through the brokerage account, it was a $200,000 bond which he purchased for approximately $120,000, correct?

A. That's not their estimate. Those are statements. Based on the analysis of brokerage statements, yes.

Q. So he bought it on the secondary market for well less than what the face value was, correct?

A. Yes.

Q. There's no crime against that, is there?

A. Not at all.

If I may just add --

Q. There's no question in front of you right now, sir.

A. Sure.

Q. Now, sir, on the list contained in Government's Exhibit 12, if we go down the top quarter of the page, there are two accountholders , one is named Robert J.

Carnevale and the other is Edward J. Hanrahan. Do you see that?

A. I'm sorry? What part?

Q. The 11th one.

A. Carnevale. Yes.

Q. So that particular item was held by Robert J. Carnevale and Edward J. Hanrahan, correct?

A. Correct.

Q. And the face amount of that instrument was just under $1.9 million?

A. Yes.

Q. And you've determined the loss to be approximately $375,000, correct?

A. Correct.

Q. That money didn't go to Mr. Caramadre, correct?

MR. VILKER: Objection, your Honor. It's asking this witness facts that first of all he has no knowledge of and seems to be getting at what the underlying scheme was. I don't think this is the hearing to determine the reason why these other accounts are part of the same scheme, and plus this witness has no knowledge one way or the other.

MR. MURPHY: Judge, that's precisely what I'm trying to show is that this witness has no knowledge about it, that simply they're putting in a figure of

$12.4 million when it can't be attributed to Mr. Caramadre directly.

THE COURT: I'll allow the question for that purpose.

Go ahead and answer.

A. Could you please repeat the question.

Q. Sure. The item we just looked at it is joint owned by Mr. Carnevale and Mr. Hanrahan, correct?

A. Correct.

Q. Mr. Caramadre's name is not on that instrument, is it?

A. No, he's not.

Q. But you included a loss based on your calculations and attributed it to Mr. Caramadre and his associates, correct?

A. Well, the loss is from the prospective of the corporation, how much the corporation lost as a result of the put. It has nothing to do with the holder of the bond who put the bond back.

Q. Doctor, when a corporation issues a bond, when they issue that bond and it's sold, the corporation receives a hundred percent of face value of that bond, correct?

A. That's correct.

Q. Now, at the maturity date that corporation has to

pay the face value of that bond to the holder of it, correct?
A. That's correct.
Q. Okay. That corporation has a choice, depending on fluctuations of interest rate in the economy whether or not to exercise its call option to purchase that bond at face value at a time other than maturity, correct?
A. That's correct.
Q. That company also accounts for, when it sells an estate-put or a death-put bond, that company takes into account that a certain amount of bonds will be put by the holder in any calendar year, correct?
A. No. Some amount may be put by a holder. Not will be put by a holder.
Q. May be?
A. May be put by holder, not will be put by holder.
Q. They put a ceiling on it?
A. They put a ceiling but the ceiling is a ceiling and it is entirely possible that the amount put is considerably below the ceiling.
Q. In fact, the company hopes that it is put below the ceiling every year, correct?
A. Assuming that the bond is not selling above par, in which case --
Q. Well, if it was selling above par, the company

would call it if they could, correct?
A. If it's callable already. Sometimes the bond is not yet callable but it is already puttable. There's a lag. These bonds normally, I believe, become puttable one year after issuance, but the call may not be exercised for several years. So there's a period when it can be put but not called.
Q. Two to four years, correct?
A. Correct.
Q. In your business, you advise these companies to win, correct?
A. To win?
Q. To win.
A. We advise them to make the correct decision.
Q. To make money, correct?
A. They are trying to minimize their cost of borrowing. That's what debt management is, minimize the cost of borrowing.
Q. So these companies with your advice go out and you have nothing to do with the underwriting or the issuance of the bond or the development of the prospectus, but you have to take into account the prospectus when you advise them on debt management, don't you?
A. We focus on certain provisions included in the

prospectus that relate to, as I mentioned, refunding, calls, puts, estate-puts, sinking funds and fees associated with the issuance. That is basically our involvement in terms of assisting our clients.

Q. Death-puts?

A. That's one of the refunding options, yes. It's an option held by the investor in this case, and that has to be taken into account.

Q. Has to be taken into account by the issuer?

A. By the issuer.

Q. And it is taken into account by the issuer?

A. It is in computing the potential cost of issuance against some alternative.

MR. MURPHY: Judge, may I have a moment, please?

THE COURT: Sure.

(Pause.)

MR. MURPHY: Thank you, Judge.

Q. Now, Dr. Kalotay, your research for the United States Government in this particular case deals in essence with just death-put bonds, correct?

A. Correct.

Q. And CDs also?

A. Correct.

Q. Sir, where in the prospectus for the bonds that are in Government's Exhibit Number 11 does it say that

the issuer will replace redeemed bonds with new bonds?
A. It doesn't -- I did not look at prospectuses, but I would not assume that there's any reference to how the issuer raises the funds.
Q. Is there anything in the prospectus or anywhere that you looked as it relates to the 33 items in Government's number 11, does it say that the investor is responsible for any losses that the issuer incurred due to the estate-put provision?
A. I didn't look at it but not to my --
Q. There wouldn't be.
A. No.
Q. Why wouldn't there be, sir?
A. Why is what?
Q. There is nothing contained in the prospectus or any information that you searched when you determined the bond loss in this case does it say that the investor is responsible for any losses that the issuer incurred due to the exercise of a death-put?
A. Not to my knowledge, no.
Q. Why wouldn't there be?
A. There's no need for it.
Q. Why isn't there a need for it?
A. It's an option exercised by the investor and is part of the prospectus.

Q. So the issuer has already taken it into consideration?
A. It's taken into account at the time of issuance.
Q. Now, sir, if I can direct your attention to Government's Exhibit Number 12.
Do you have Number 12 in front of you, Dr. Kalotay?
A. Yes, I do.
Q. Now, if we start from the bottom, if we go to the R's or -- actually, the D's. Where did you get this list from, sir?
A. These are from brokerage statements.
Q. So the bottom of the page says "Andrew Kalotay Associates." This was produced by your firm?
A. Yes.
Q. Under your supervision?
A. Under my supervision, yes.
Q. Have you seen this document prior to today?
A. I believe I have, yes.
Q. Do you believe you have or have you, sir?
A. Well, I looked at a lot of these but my recollection is, again, I believe I've seen this document.
Q. Okay. And it says, "Loss By Accountholder" at the top of the page, correct?

A. Yes.
Q. Okay. And the first accountholder, for instance, Linda Barbeau, where is she?
A. What do you mean "where is she"?
Q. Where is she? Where is she today?
A. I don't know. I assume she's deceased, but I don't know.
Q. Okay. Where it says "Joint Accountholder" --
A. Yes.
Q. -- where is that joint holder today?
A. I don't know.
Q. Well, your firm prepared this list and on the left side it says "Accountholders," and there's multiple names, 20 plus, and then to the right there's a second column called "Joint Accountholders," and there's a corresponding name to each accountholder with a joint accountholder, correct?
A. Correct.
Q. And then there's "Brokerage"?
A. Yes.
Q. And the first one is Schwab as it relates to Linda Barbeau, and then it says "Face Amount, $853,000," correct?
A. Correct.
Q. Face amount of what, sir?

A. It's face amount of bonds held in this account.
Q. Okay. Do you know what type of account it is?
A. I do not.
Q. Where it says, "Loss" next to Linda Barbeau, it says $134,000. What is that loss, sir?
A. That loss represents the loss to the corporations whose bonds had been held in this account and which were put back to the corporations.
Q. How were they put back to the corporations, sir?
A. Under the death-put provision.
Q. So in 12, then, where it says, "Loss by Account," the accountholders, they're all dead so the joint tenant exercised the death-put?
A. Well, I don't know anything about the accountholders. I'm explaining that the loss is from the perspective of the corporation whose bonds were redeemed.
Q. And all of these bonds redeemed in Government Section 12 were redeemed under the death-put or estate-put option?
A. I believe so. This is based on the study of the brokerage accounts that we had received.
Q. Brokerage accounts that you received?
A. From Mr. Vilker and his colleagues. The information we received.

Q. Well, who gave you the information for Exhibit 12, sir?
A. I believe it all came from Mr. Vilker's office.
Q. And you used that to determine the loss?
A. The loss to the corporations whose bonds were redeemed under the death-put provision.
Q. Okay. Well, I mean, looking down in the "R" column, Edwin Rodriguez, you have him down as a loss, correct?
A. Correct.
Q. Do you know why that is, sir?
A. I do not know.
Q. You see Mr. Caramadre in Court today, don't you?
A. Yes.
Q. Well, where is Mr. Rodriguez?
A. I don't know.
Q. Is he dead?
A. I assume he's dead.
MR. MURPHY: He's alive, sir. He testified at trial.
THE COURT: Mr. Murphy, do you want some time to consult with Mr. Caramadre?
MR. MURPHY: One minute, please, Judge.
THE COURT: Sure.
Actually I see that it's one o'clock. Maybe

we'll break now for lunch, and we'll resume, we'll shoot for 1:45. The Court will be in recess.

And, Doctor, you'll still be under oath.

(Lunch recess.)

THE COURT: Good afternoon, everyone.

Doctor, you are still under oath. I would remind you you're still under cross-examination.

Mr. Murphy?

MR. MURPHY: Judge, I have about five more minutes.

THE COURT: Okay.

Q. Dr. Kalotay, do you still have the red book in front of you?

A. Yes, I do.

Q. Sir, if you can turn to Exhibit Number 11, and that's the table that your company has labeled as "Loss By Issuer"?

A. Yes, it is.

Q. Starting from the top, the first one, the first issuer is General Motors Acceptance Corporation?

A. Yes, it is.

Q. Did GMAC send you information concerning their alleged loss for your calculation?

A. No, they did not.

Q. The second one, did Country Wide Financial send

you information concerning their alleged loss for your calculation?

A. No.

Q. Did Bear Stearns Company, Incorporated send you information concerning their alleged loss?

A. Nobody did.

Q. So nobody listed on Table 1 provided you with any information concerning their loss?

A. Nobody has. Nobody did.

Q. So you don't know if any of those companies listed in Exhibit 11 replaced the money that they had to use to redeem the estate-put, correct? You're just assuming?

A. I don't know how they funded the estate-put.

Q. Doctor, you calculated the loss based on the time of redemption that utilized the estate-put through the maturity date of the bond, correct?

A. That's correct. I considered the expected cost because I'm not sure, as I indicated before, what is going to happen to this bond. There could be more estate-puts, there could be calls depending on what interest rates do.

Q. Right. So your calculation is hypothetical?

A. It's in accordance with standard bond valuation principles.

Q. But you don't know what was going to happen from the time of redemption of the estate-put bond through maturity, correct?
A. That is correct. I based my assumptions on the prevailing interest rates.
MR. MURPHY: Nothing further, your Honor.
THE COURT: Mr. Thompson.
MR. THOMPSON: Thank you, your Honor.

CROSS-EXAMINATION BY MR. THOMPSON

Q. Dr. Katolay --
A. Kalotay.
Q. I apologize, sir.
A. That's no problem.
Q. -- you just testified, I think, in answer to the last question or the second to last question that your calculations were based on standard bond valuation principles; is that correct?
A. That is correct.
Q. And that's essentially what you specialize in?
A. That is correct.
Q. Bond valuation.
You made a distinction when Mr. Vilker was questioning you, he was asking you, you were hired to calculate a loss amount to the corporation and your answer to that would be, was: It's not that simple. I

calculated the value of the bonds and therefore the money that would -- how much it would cost the corporation to borrow that money. Correct?
A. I believe more precisely I said I calculated the expected cost of the debt or the expected cost of the liability. I think those were my --
Q. And your testimony to that is because that's not the same thing as loss, correct?
A. Well, if I may just define what I mean by "loss."
Q. Of course.
A. All right. So the loss is the difference between two numbers, one is this number that we have been -- you just mentioned, which is the expected cost of servicing the debt over its life, taking into account various complications arising from puts and calls versus a cash payment today in the par value. A difference between those two numbers is what really we call the loss. That's our definition.
Q. All right. So I may have a poor understanding of what you're saying then, because my sense of your testimony was that you are not using the cost of a cash payment today. You are using the cash payment plus any borrowing costs that come along with that cash payment if you borrow that money, right?
A. Let me clarify. If you make $1,000 cash payment

today, the cost of that payment today is $1,000. That's what it is.

Q. I agree.

A. That's what it costs -- that's the cost to repurchase something which is being put back where you have to pay $1,000. The question is what if you don't pay it back? What is the cost of leaving this bond outstanding and observing what might happen to it over time and try to value that. And that's the cost of debt assuming that it is not being put back today, and the difference between those two numbers is what we call the loss to the issuer.

Q. Exhibit 10 is your company's report on the estimate of losses, correct?

A. Yes.

Q. And on page two of Exhibit 10, there's a paragraph entitled "Determining the Loss to Issuers," correct?

A. Yes.

Q. And it says: "The main challenge in estimating the loss to issuers is determining what the values of the bonds were." Correct?

A. Yes.

Q. Parentheses, "in terms of their replacement cost"?

A. Yes. And replacement cost is not defined very accurately but that's what it says, yes.

Q. Okay. Well, then you go on. The very next sentence is: "These values depend on the issuer's prevailing borrowing costs because that is how the issuer has to raise the funds required to pay off the bondholder." Right?
A. That's correct.
Q. So the main challenge, you say in this paragraph, is determining what the replacement cost is, right?
A. The main challenge is to determine the cost of leaving the bond outstanding but that cost is determined taking into account the cost of replacement, the cost of raising that today.
Q. Right.
A. That's what it is. It's a little confusing, I realize.
Q. It is. It's very confusing. Because you're trying to calculate what the cost to a company is to raise that amount of money today to repay the bond, right?
A. Actually, what we're focusing on here, and maybe it's best if you look at the following page, page C, on the third box where we refer to this replacement cost as the fair value of the bond. It's probably more helpful because it's less confusing, the fair value of the bond.

Q. Let me ask you what bond you're talking about, the bond that just got redeemed or a new bond that has to be issued?
A. No. No. The bond that has just gotten redeemed, what it would cost if it had not been redeemed. That's the precise statement. What would it cost had it not been redeemed.
Q. Can we go back to page two, that sentence I was showing you.
A. Yes, please.
Q. Why does it say that: "The issuers prevailing borrowing costs is essential because that is how the issuer has to raise the funds"?
A. Right. Perhaps saying that that is how they must raise the funds is a bit of an overstatement that for analytical purpose you assume that an issuer and his capital, and I don't mean to get into too much complexity, it has some equity and it has some debt. And you assume that the amount of debt, more precisely what we call the equity-to-debt ratio is determined.
So if you refund -- if some of the debt disappears for whatever reason, then presumably, eventually it will be replaced by debt.
Q. Why would you presume that?
A. That's a standard corporate finance assumption and

we can talk about that. That has to do with capital structure and other complications. I'm happy to --

Q. We have a big list of companies here, right? Let's go to Exhibit 11, if we could.

GMAC, that's a business, right?

A. Hang on. Exhibit 11?

Q. Exhibit 11. Yeah. I'm just picking the top name again, GMAC?

A. Sure.

Q. That's a corporation, right?

A. It's a corporation, yes.

Q. And the corporation's job and their responsibility to the shareholders is to make money, right?

A. Correct.

Q. And they don't make money by issuing debt and just issuing debt and delaying repaying it, do they?

A. They do not.

Q. They earn money by providing a service to someone, correct?

A. That's correct.

Q. Okay. Caterpillar is on there, too.

A. Can we stay with GMAC? It was a finance company and so they would say for the sake of argument that we finance this company, this 90 percent debt and 10 percent equity, just for the sake of argument. So if

some of the debt disappears for whatever reason, eventually it would be replaced to maintain that --

Q. That's how they choose to do it.

A. That's how they normally would do it.

Q. That's if they choose that they want to keep that ratio, right?

A. That is correct. And that's the basic assumption that I make in the absence of --

Q. Okay.

A. That's a standard finance assumption.

Q. It's a standard finance assumption that a company's debt equity model is going to stay the same throughout time?

A. No. But given that there's a debt-to-equity ratio, you're not going to change it just because some transaction occurred on this level.

Q. No. I would agree with that. I think you already testified this is up to a $15 billion debt issue and at the most here we're talking about what you call a loss of $4.7 million, right?

A. Right.

Q. That's not even a blip on the screen for GMAC, is it?

A. Well, it's not even the loss. It's the amount that they have to pay -- they have to somehow pay $10

million, and that's the amount of money that somehow they have to come up with.

Q. You're saying some day -- based on your understanding of their ratios and standard finance practice, you're saying some day they will have to borrow money to repay that?

A. Some other debt issue may have to be increased by this amount.

Q. May be, right?

A. May be.

Q. When will they borrow that money?

A. Well, a finance company such as GMAC was in the market almost continuously.

Q. But you're saying some day they might have to adjust their books, some day they're going to have to borrow another $10.8 million. When do they have to borrow that?

A. I would imagine that in the case of a company like GMAC under normal conditions that extra $10 million would be added to the next issue, which is in a few weeks. Within days of --

Q. Couldn't they just pay with profits they have from their regular business?

A. Well, it's not so much profits. Would they have cash.

Q. Yeah. Cash.
A. They may have cash but even very large companies typically have very little cash; but even if they do, they have that cash for some particular purpose. So if it is paid to service, to retire bonds under the death provision, they would have to raise some money to replenish the cash.
Q. You're saying based on their model that they want to mostly have their capital by borrowing, that some day they're going to have to borrow this money?
A. Exactly. It's no different from saying if I have a mortgage and suddenly I have to repay it and it's a five percent mortgage and now I have to repay it. Now, I don't have the cash. I may have the cash but --
Q. What if you had the cash? Would you make a different -- as an advisor, a bond advisor, would you make a different recommendation about repaying the mortgage based on whether the person you're consulting with had the cash or did not have the cash?
A. I would look at -- when we talk about the mortgage, if you do have cash, then what you have to take into account is alternative investment opportunities.
Q. Right.
A. And I would imagine, I think that under these

conditions that we have here, the value of the bond that you are repaying is well under a hundred, well under par. So I would imagine that if I had cash, I would much rather invest it in something whose value is at par. I'm not getting my money's worth by buying back at par something whose value is considerably below par.

Q. You indicated that there's a higher underwriting fee for death-put bonds; is that correct?

A. That is correct. That has to do with the retail structure of these bonds. They are in very small denominations and sold in small amounts.

Q. Because there's a higher underwriting fee, does that enter your loss calculation?

A. No, it didn't enter in this calculation. That becomes a factor when you decide between issuing bonds with this feature versus issuing institutional bonds where the underwriting fee is much lower.

Q. So when you did your loss calculation, did you calculate with the lowest possible fees?

A. In our loss calculation, the fees were not taken into account at all. Reissuance fees were not considered.

Q. That's not part of the issuer's prevailing borrowing costs that you talk about?

A. No. We did not take that explicitly into account.
Q. What do you mean "explicitly"?
A. You can say what would it cost me to issue, for the sake of argument, 10-year bonds.
So as an example, you can ask the question what would it cost for a particular corporation to issue 10-year bonds. So you could say, well, the investors demand four percent so you might say the borrowing cost for ten years is four percent; but then an alternative way of doing it you say, yes, the investors demand four percent but I have to pay as an issuer two percent underwriting fee, and now my cost is actually higher than what the borrowers receive because of this transaction cost. We did not take into account the additional issuance cost.
Q. Mr. Murphy reviewed with you part of a prospectus for the GMAC bonds. Do you remember that?
A. Yes.
Q. And that prospectus included the so-called estate-put or the death-put, correct?
A. Yes.
Q. And that option is something that GMAC chose to put in as a feature of the bond, correct?
A. Correct.
Q. And that's a feature of the bond designed to make

it more attractive as an investment for retail buyers?
A. Correct.
Q. If a bond has a feature that makes it more attractive to retail buyers, it is worth more in the market, correct?
A. Retail buyers will pay more for it, correct.
Q. So when GMAC issued that bond, they made more money, they were able to collect more money because of that option in the bond, correct?
A. Well, if I may just put it slightly differently. They were able to get away with a somewhat lower interest rate.
Q. Yes.
A. It's equivalent to what you said.
Q. There's give and take, is there not?
A. Yes.
Q. Because they put in a feature that is better for retail investors, they got a provision that was maybe more favorable to them, correct?
A. Correct.
Q. So when they issued the bonds, they got something in return for putting that death-put option in, correct?
A. They got a lower interest rate, nominal interest rate, which presumably was sufficiently lower that even

after taking into account the death-put provision and the higher issuance costs, it was still favorable to issuing standard institutional bonds.

Q. Right. They made that calculation at the time of issuance it was more favorable to them to include that option, right?

A. Yes.

Q. So therefore, at the time of issuance is when they collected their benefit from including that option, right?

A. Well, not exactly, if I might say, because keep in mind that, again, you have to look at various interest rate scenarios over the life of the bond. And under some scenarios, this, including issuing these bonds with the death provision would be better than issuing institutional bonds; under some other scenarios it would be worse. But when you average out all these things, odds would favor issuing in this case. So that's odds would favor, but you don't collect anything at the time. It's playing the odds.

Q. You collect the money from selling the bonds. GMAC actually collected that money, right?

A. They collected money, but if you just look at the money, they actually up front they got less money than if they issued institutional bonds because they have to

pay more fees. So the benefit does not come at the time of selling the bond. The benefit comes over time when they pay lower interest rate on these bonds.
Q. I don't think that's correct. I think you're adding an extra variable there. When you testified a minute ago you said that there was a tradeoff, and the tradeoff to the investor was that they get the death-put. And the tradeoff to the corporation was that they have to pay less in interest, correct?
A. That is correct.
Q. There was no tradeoff to the price of the issuance of the bond.
A. My point is about you use the word "benefit." What is the benefit? It's like having one mortgage with some feature over another mortgage with another feature and one pays higher than the other. The benefit doesn't come when you enter into the contract. The benefit comes over time when you're paying less on one structure than you pay on another. So I would not say that they collected any benefit at the time of issuance.
Q. Let me give you a for-example then. Like you said, we're going to have two different mortgages or two different bond issues, right?
Bond issue number one has an annual interest

rate of five percent, let's say. Bond issue number two has an annual interest rate of five percent. Okay? Identical so far, right? Bond issue number two has a death-put option, okay? Bond issue number one does not. Which one will be easier to sell for GMAC to raise their money, to raise their capital.

A. Clearly it would be the one with the death-put provision.

Q. Right. Clearly, B would be easier. Because it has a death-put, they will have an easier time raising their capital when they issue the bond, right? They will have an easier time raising their money, right?

A. Well, from retail investors. But if you look at the piece that I published, I made it very clear that there's a substantial difference between the retail bond interest rate and the institutional. And as I explained in my article, I was stunned to see this big difference.

Q. It doesn't make sense to you?

A. Well, it did make sense once I understood what was going on.

Q. The corporations are making that decision to put in that feature because it benefits them, right?

A. Because it benefits them.

Q. And they get the benefit, part of the benefit up

front because they have an easier time raising the money up front?

A. Well, normally, when we talk about "benefit," we mean somehow cash flows. To me everything here boils down to cash payment. And up front you're not getting --

Q. Two bonds with an identical interest rate and one has a death-put and one doesn't, the one with the death-put is more easily sellable for them, right?

A. But that's not a fair comparison because that's not what they are facing. They are facing two alternatives. One is to issue, to sell a bond with a five percent with a death-put provision or sell another bond, for the sake of argument, that has a five-and-a-half percent bond without a death-put provision. Those are the alternatives that they are looking at, not one without and one with.

Q. My point is having the death-put provision in there helps them raise money up front. There's other ways they could try to raise money up front, but that's one that they choose to include because it helps them sell the bonds, right?

A. That's correct.

Q. Okay.

A. But the benefit is not up front. The benefit

comes over time. This is the only point I would like to make.
Q. Okay. The point I would like to make is that if they have an easier time selling it, that means they have an easier time collecting the money for it, right?
A. I mean, that's a tautology that if something is easier to sell, it's easier to sell. It's a tautology.
Q. Right.
A. I can't comment on it.
Q. You can agree? It's a tautology. You can agree.
A. I can agree.
Q. Right?
A. I agree.
Q. You consult companies in the structure of the their bonds, correct?
A. Yes.
Q. And sometimes in that consultation it turns out that issuing a bond is not the best way for them to raise money, correct?
A. Issuing a particular structure may not be the best.
Q. But always issuing a bond is the answer?
A. Well, normally, I'm involved only in the issuance of bonds. There could be occasionally times when the market is in turmoil for short periods and the

recommendation then would be stay out of the market until it settles down.

Q. You indicated earlier, I believe, that to estimate the prevailing rates for these companies, you did it based on some Standard & Poor's credit ratings at the time?

A. Not credit ratings. They actually put out credit spread information. That's not a rating. Which is derived from prices of bonds that they somehow obtain and analyze.

Q. They analyze those from the market overall?

A. From market prices, yes.

Q. And you analyze -- I think you said you used two different classes of that analysis, correct?

A. Correct.

Q. So you didn't figure out or find out for each individual company what their finance curve was, right?

A. That is correct. It was a rough estimate for two different classes only.

Q. Okay. You didn't contact each company to find out --

A. We did not.

Q. -- their curve?

A. No, we did not.

Q. Did you contact each company to find out how they

repaid the money?
A. We did not contact any company, and we did not look at how they replace debt. That kind of analysis could have been done, but I did not think it was warranted under the circumstances.
Q. A company has to pay taxes every year, correct?
A. Correct.
Q. And for that reason, for accounting purposes and tax-paying purposes, in any given year a company would rather have high expenses and lower profits for tax purposes, correct?
A. For --
Q. For the purpose of paying taxes?
A. Particularly for taxes, yes.
Q. Right. It's generally established in the finance world and in the corporate world that you'd rather -- if you have debts, you'd like to move them up as quickly as possible; and if you have profits, you'd like to push them down the road all for tax purposes?
A. If you're talking strictly about taxes that is true.
Q. I am.
A. At the same time, companies want to issue high earnings, and earnings and taxes tend to go in opposite directions. So you have to be very gingerly when you

make a statement about taxes and disregard accounting considerations.
Q. Yes. But right now I'm talking about taxes, right?
A. If you talk strictly about taxes and disregard accounting, correct. But can you disregard accounting? It's questionable. All right.
Q. So there can be a benefit to these corporations for paying back these bonds sooner, correct, for tax purposes?
A. Could you explain where the tax benefit comes from?
Q. When they have to repay a bond today rather than in 20 years from now, they're able to show an expense of say $100,000 today rather than putting that expense off 20 years, right?
A. That's not an expense.
Q. What is it?
A. That's a principal payment. It's not interest. Interest is taxes. Principal is principal. Principal you can't deduct. You could deduct principal if it was repaid -- there would be tax ramifications if you paid less or more than the so-called tax basis or par. But if you're repaying something that you're showing on your books at hundred and you paid a hundred for it

there's no tax ramifications.
Q. There's an accounting ramification, though, employing that expense down the road off of your books, correct?
A. Well, when you say "accounting ramification," what exactly are you referring to?
Q. You referred to we have to keep in mind accounting. The accountants, it's important to them how much debt is on the company's books, right?
A. They rebooked it.
Q. It matters in accounting how much debt is on the books, right?
A. Right.
Q. Okay. So if a company repays these bonds earlier, that wipes some of their debt off the books, right?
A. If they do not replace the bond, they will be showing less debt on their books.
Q. Right. Well, they don't replace it instantly, certainly. I understand hypothetically you're saying that some day they might, but certainly the day they repay it they don't reissue it right then, right?
A. That's correct. They have less debt and they have less cash.
Q. So there's some benefit to them on the accounting side in that they have less debt?

A. I'm sorry. I really don't understand what benefits you're referring to.
Q. If a company has less debt, is it easier for them to borrow money? Do they have better credit if they have less debt?
A. That's correct.
Q. Okay. So there's a benefit, right?
A. But if they have less cash, what does that do? If a company has a lot of cash, it makes it easier for them to borrow, too.
Q. So you're saying these companies have the cash available to make this repayment?
A. All I'm saying is that you have to look at both sides of the balance sheet. That's all I'm saying.
Q. Right. But you're saying now they're down cash. Before you were saying they have to borrow the money for this cash. Now they have the cash?
A. Well, that was your statement, that what if I replace cash. I thought that was your assertion, what happens if you use cash.
Q. Right.
A. Well, I'm picking up on what you said. And if you use cash, you'll have less cash. That's all I'm saying.
Q. Okay. You said that, obviously we've talked a

couple times, you represented or you consult for the Tennessee Valley Authority?
A. Yes.
Q. And I think you said that it was you that actually pointed out to them what had happened in this case?
A. Yes.
Q. Okay. So before you pointed that out to them, they were not aware that they had theoretically lost money?
A. They did not know about this.
Q. So they hadn't issued any extra bonds, right, based on this?
A. Oh, you mean all these puts? I'm sure they did not.
Q. Exhibit number 11 is entitled "Table 1, Loss By Issuer," right?
A. Yes.
Q. Would it be more accurate to entitle that "Loss By Issuer If They Reissued Bonds To Pay This Debt"? Would that be more or less accurate?
A. I don't believe you need that qualification.
Q. I'm not asking whether you need it. Do you think it would be more accurate?
A. I don't believe so. Again, let me tell you why. Because the cost of the outstanding bond, the cost of

the liability is computed taking into account the issuer's current yield curve, current borrowing rates because that is a standard way of quantifying the cost of a liability. It's no different from looking at a pension fund and saying, I have all these obligations going out in the future and I have to make all these payments, what is the cost in terms of current rate, present value of this team of payments. So that's all we're doing here and we really do not get into how you are replacing it, although the implicit assumption is, and explicit sometimes, is that, oh, yeah, ultimately you're going to be issuing more debt.

Q. I mean, that is the explicit assumption.

A. It is. But kind of tangential to the issue is, the main point is what is the cost of this liability. And as we have discussed a number of times, if the interest rate on this liability is below prevailing borrowing rates, the cost of this liability is going to be below a hundred. And if I have to pay a hundred for it, by hook or by crook, I'm paying more for it than what it would cost me to keep this liability alive.

Q. Do assumptions about interest rates over time factor into your valuation of the bond?

A. Yes.

Q. Okay. And so a bond that matures in 30 years is

more difficult to value, other things being equal, than a bond that matures in 10 years?

A. It's not more difficult to value for the computer. It's the same amount of growth. What makes the valuation difficult, and again I am repeating myself, is that you have to take into account that these bonds could be put any time between now and maturity. And if rates stay where they are or if rates are above the coupon rate, we assumed that the bonds would be put, that rate is the value of these bonds, the cost of servicing these bonds to the issuer and it reduces what we call the loss.

Q. So when you're calculating what you call the loss, you do have to make certain assumptions about interest rates in the future?

A. We make some assumptions, yes. And the assumptions again are standard assumptions. I'll be happy to elaborate, if you'd like.

Q. They may be standard, but they're still assumptions, right?

A. They're assumptions.

MR. THOMPSON: Okay. May I have one moment, please, your Honor?

THE COURT: Certainly.

(Pause.)

Q. Sir, are you familiar with the fact that -- and again, we're going to use the GMAC bonds just because that's what we've been mostly talking about, that's again at the top of Exhibit 11, today are trading for above par value?

A. I was not, but I was under the impression that GMAC was gone. I didn't even realize. I thought they became Allied Finance or Allied Bank or whatever. Am I wrong on that?

MR. CARAMADRE: It's the same parent company.

Q. Is the name GMAC gone but there's the same parent company to it?

A. I don't know enough about the corporate structure I'm afraid.

Q. If a bond was trading for more than par value today, is it possible that that corporation actually saved money by paying off this debt earlier?

A. With perfect hindsight, everything is possible in general.

Q. We're trying to assess the loss today. So we do actually have the benefit of hindsight. If these bonds are trading for above par value, would these companies actually today have saved money by paying off these bonds in 2008, 2009?

A. I cannot -- I have not thought about this but

presumably --

Q. They would, right?

A. It's possible. I mean, I think CIT is here, and I believe CIT has just come out of bankruptcy. I'm not familiar with exactly what happened to the bonds but --

Q. I'm just saying generally for any of these, if it's today trading for higher than par value --

A. If rates go down, prices go up and --

Q. It was better to pay it off back then?

A. I wouldn't go as far as it was better then because the moment they pay them off -- again, if you go back to my basic premise about funding it, just think about it, so they had five percent bonds and they had to replace them with let's say eight percent bonds, so between then and now they have been paying more interest, similar to the mortgage example that I mentioned.

MR. THOMPSON: Okay. Thank you.

THE WITNESS: Thank you.

THE COURT: Mr. Murphy, do you want to move Exhibit B full?

MR. MURPHY: Yes, your Honor.

THE COURT: Any objection?

MR. VILKER: No objection.

THE COURT: All right. Exhibit B will be

received full.

(Defendant's Exhibit B admitted in full.)

THE COURT: Let me ask whether -- Mr. Caramadre, do you have questions for additional cross-examination on matters that are not already covered by the examination that's already been conducted?

MR. CARAMADRE: No, I'm fine, your Honor. Thank you.

THE COURT: All right.

Redirect, Mr. Vilker.

REDIRECT EXAMINATION BY MR. VILKER

Q. Good afternoon, Dr. Kalotay.

Dr. Kalotay, a couple of times on cross-examination you referred to a couple of individuals in your office, Kalotay and Associates, who were working with you on this project. And I believe you stated that they were the ones who crunched the numbers. Can you state again who these individuals were.

A. Yes. One of them is Leslie Abreo, and Leslie is a man, A-B-R-E-O; and the other is Radek, R-A-D-E-K, Wyrwas, W-Y-R-W-A-S.

Q. And what is their background?

A. Leslie Abreo was a student of mine when I ran the Financial Engineering Program at Polytechnic University

from I believe '95 to '97. And I think Leslie has an undergraduate and master's degree, I believe, in mathematics and degree in financial engineering. He's been with me for over ten years.

Q. What about Radek?

A. Radek is a more recent arrival. He has a degree in economics from Baruch College and he joined us about a year-and-a-half ago.

Q. So when you say that they were the ones who crunched the numbers here, what do you mean by that?

A. They looked at the information that we received from you, and they put it on the computer. They did the analysis in terms of -- they obtained these credit spread curves from Standard & Poor's, and they collected the Treasury rates for the individual dates that we needed for analyzing these bonds. They used the computer to do the calculations.

Q. Were you supervising them as they were doing this project?

A. Absolutely. I mean, I told them what to do, but I did not actually go to the computer.

Q. So they're the ones that went out and typed the information to the computer?

A. Yes.

Q. But the process by which you arrived at your

conclusions was your own process?
A. Yes. And the methodology is the methodology that I requested.
Q. Now, there were some questions that you were asked before about the CDs. What's the distinction between a CD with an estate-put feature and a bond with an estate-put feature?
A. Well, a bond is a security. It has a CUSIP number. It trades -- CDs in the traditional form were very simple. They were just bank deposits. Over time, they have become more complicated. So in the old days a CD would typically be less than a year. I understand that today you have CDs that go on for five years and then they made them more complicated by adding call options to them and other features.
Q. Well, for purposes of the analysis that you did, was there a distinction in terms of determining the loss to a company if it issued a CD with a death-put feature as opposed to a bond?
A. Not really. It's all cash flows.
Q. These companies would still need to replace the funds?
A. Yes.
Q. There were some questions about the estate-put limits. And I believe you saw a prospectus which

indicated there was a one percent limit and that would indicate that if it was a $15 million bond that up to, and correct me if I'm wrong, was 1.5 million --
A. No. No. Half a million.
Q. Half a million?
A. $15 million bond? One percent --
Q. That's why you have the math degree and I have the law degree. So up to a half million dollars could -- is subject to that maximum, correct?
A. Yes.
Q. Is the maximum in your experience -- first of all, is that maximum in the discretion of the issuing company?
A. The issuing company is obliged, I believe, to pay up to that one percent if bonds are actually put. As a practical matter, if more than one percent is put, they may choose to also honor those. The alternative is to put these bonds in a queue. That's my understanding.
Q. Well, do you know in practice if these companies were honoring the puts that went beyond the potential cap in the prospectus?
A. I do not know, but one observation I'd like to make is that if you look at the interest rates in the last 20 or so years, by and large rates have been coming down so what has dominated the management of

these bonds has been not the puts but the calls because the issuers were more often than not able to call these bonds after three or four years and refund them.

So the puts have been, I think, until '08, '09 have been relatively rare.

Q. But getting back to your analysis that you did, did the fact that some of these or many of these bonds had an annual cap in the prospectus, was that of any significance at all to the mathematical computation you had to perform?

A. No. And that one percent comes in going forward actually and assuming that if interest rates remain high, the one percent of the bonds would actually be put. As a practical matter, it may be less than one percent, in which case the cost of the debt would be lower than predicted by the model and the loss would be also larger.

Q. Okay. So the bottom line with all that is that the fact that these bonds had a cap in the prospectus that the companies would not be obligated to redeem the bonds beyond a certain amount, that had no effect on the loss value to these corporations of having to pay this money early?

A. No. We just assume that in the future, if warranted, one percent of the bonds would be put. If

warranted.

Q. Now, you were asked also about these different prospectuses and they go from cradle to grave with these bonds I believe was the question and the answer, and you indicated you hadn't reviewed the prospectuses?

A. No. Typically, when I look at a prospectus, and I do look at prospectuses, but I immediately go to two or three pages that describe call options, if any; put options, if any, for estate-put; and sinking fund provisions. Those are the so-called embedded options in a bond and that's, for my quantitative purposes, that's all I focus on.

Q. Okay. The work that you did on this particular case, was there anything in these prospectuses that was relevant to your analysis of the loss value of the funds by the corporations by having to pay back these bonds early?

MR. THOMPSON: Objection, your Honor. Fact not in evidence. He didn't look at the prospectuses.

A. I did not look at the prospectuses.

THE COURT: Sustained.

Q. Why did you not look at the prospectuses?

A. I just didn't think I needed to. We had the terms of the bonds. We had the bond database so we did not need it.

Q. You were asked about the transaction costs of these estate-put bonds, and you indicated that they were higher. And I believe Mr. Thompson just asked you if that was a factor that you took into account that to reissue new bonds they would have additional increased transaction costs. And I believe you testified that that was something that you didn't include in the loss totals?

A. No. That is correct. We did not consider transaction, transaction costs coming at the time of issuance in terms of choosing between alternatives. In this case, we don't assume that the replacement bond is going to be another bond with an estate-put. It could be any bond.

Q. When these corporations have to pay back in the example we were talking about that $200,000 General Motors bonds, the corporations have to raise that money through the issuance of new bonds. So whatever bonds they may be, those bonds will have transactions costs?

A. That's right.

Q. Underwriting fees and lawyer fees and what have you, right?

A. That's correct.

Q. But those fees, even though they're actual additional costs to these companies, the fact that they

have to issue new bonds were not included in your loss totals?

A. That is correct. We did not include those.

Q. So is it fair to state that the totals that you listed actually understate the losses that these companies suffered?

A. That is correct. And I can tell you how if I incorporated these what would have to happen and I can quantify them, the extent of this additional loss.

Q. So you haven't quantified it, but there is out there if work were be done some additional amount that could be determined?

A. We did not look at underwriting fees associated with reissuance of the debt.

Q. Now, I believe Mr. Thompson was asking you also questions about some assumptions that you made in your analysis. And there was an assumption on interest rates going forward. There was some assumptions about they used two different classes of bonds instead of looking at the exact bond, exact company and the exact day. And there were different assumptions that you made in your analysis, correct?

A. Correct.

Q. So is it fair to state that your analysis was not aimed at providing an exact down-to-the-penny dollar

amount of the losses but rather a rough estimate of the losses in this case?
A. That is correct. Had we been looking at individual transactions by issuer of clients when they come to the market and they issue half a billion dollars of debt, then of course we would have needed much sharper pencils.
Q. To refine this analysis even further and to look at the individual transactions beyond making some of these assumptions that you made, what amount of work would have needed to have been accomplished?
When you say "sharpen your pencils," what else would you need to have done?
A. Well, we could have looked at each of the corporations instead of just classing them as investment grade and not investment grade. We could have said, all right, this issuer had a borrowing cost which was 20 basis points, one-fifth of a percent higher or lower than somebody else's and that all could have been done.
Q. How much additional time would that have taken?
A. It would have taken quite a bit because you have to do it by issuer and by date of transaction.
Q. So correct me if I'm wrong, to come up with a simpler way of doing this that would still provide a

fairly accurate total for the losses, you made some working assumptions?
A. Exactly. And it was somewhat convenient because we could obtain the required spread information from Standard & Poor's; otherwise we would have had to somehow come up with our own spreads based on -- I'm not sure what data.
Q. And in this particular case, we have a number of bonds in these different companies that were selling well below par. Some of them even less than par. So in that instance there might be $100,000 in bonds that the Defendants here were purchasing for let's say $40,000 to give an example.
If a bond is being sold for $40,000 on the market, what does that mean about the prevailing rate and how much that bond is worth to the company?
A. Well, it means that the prevailing rate for that company would be significantly higher than the stated interest rate on the bond.
Q. So if that bond that's now selling for $40,000 had a three percent interest rate, does the fact that it's selling for $40,000 mean that the public, the purchasers of these bonds are saying this three percent is not enough, therefore it's driving down the price of the bond?

A. Well, what they're saying is if three percent is the rate, then the price I'm willing to pay is this. If you want to get a hundred, you have to raise the rate.

I do want to emphasize, however, that in our calculations we don't really care how much the investor paid for the bond. We don't care whether the investor paid 40 or 20 or 150. It doesn't matter. All we care is what that bond was worth, what the cost of debt was to the issuer at the time the bond was put back. That is the relevant part for us, not the history of how we got to where we are.

Q. Okay. But in terms of the history, and I understand it's not the direct number you're using in your computations, but does the fact that the bond is selling for substantially under par mean that by definition that the prevailing rate that the company has to now borrow money from is going to be higher than the rate on the bond?

A. You're saying now at the time it's being put?

Q. Yes.

A. Yes. I thought you were referring to the time it was purchased. So we have two different -- I'm sorry. You're talking about two different dates.

Q. Right. At the time it's being put.

A. At the time of being put, if the rates are much -- we did not look -- at the time of the put, we did not look at the market price of the bond. All we did was we looked at the prevailing borrowing rate for the issuer and from that information and from the terms of the bond we imputed a cost to that bond to the issuer.
Q. I may be misunderstanding this, but all I'm trying to ask is if the value of the bond on the day it's being put is substantially under par, does that mean that by definition that the cost to the issuer borrowing more money is going to be higher than what they would be paying out in the bond?
A. That is correct. That's a true statement, I agree, but I do want to emphasize that that's not the analysis --
Q. No. I understand.
A. -- that we did. Just for the record.
Q. That would mean that by definition there is a loss whenever a death-put bond is put back if the value at the time of the put is below par?
A. Yes. One difficulty, if I may point out, with these bonds as discussed earlier, they don't trade very much. It's hard to find out what the true value is at any given date. You may see some transaction that occurred. There's no indication that the transaction

that just took place occurred at a quote, unquote, fair price.

MR. VILKER: Okay. Your Honor, I have no further questions. Thank you.

THE COURT: Mr. Murphy?

MR. MURPHY: No, your Honor. Thank you.

THE COURT: Mr. Thompson.

MR. THOMPSON: Nothing, your Honor. Thank you.

THE COURT: All right. Doctor, thank you very much. You're excused.

Mr. Vilker, do you have another witness for today, or do you want to break for today and recommence tomorrow morning?

MR. VILKER: I think it would be better to start with the annuity portion tomorrow, your Honor.

THE COURT: All right.

Doctor, thank you very much. I think we all understood.

Any business that we need to pay attention to in terms of keeping the wheels on the bus going forward? Any issues for the Defendants, the Government?

MR. VILKER: Nothing from the Government, your Honor.

THE COURT: All right. Then we will be in recess for today.

(Court concluded at 2:50 p.m.)

C E R T I F I C A T I O N

I, Anne M. Clayton, RPR, do hereby certify that the foregoing pages are a true and accurate transcription of my stenographic notes in the above-entitled case.

/s/ Anne M. Clayton

____

Anne M. Clayton, RPR

December 20, 2013

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Date